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FLOOD RISK AND RESILIENCE PROGRAM

Parish Flood Risk and Resilience Capability and Capacity Assessment



Report: Final

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Coastal Protection and Restoration Authority

The Coastal Protection and Restoration Authority (CPRA) was established by the Louisiana Legislature in response to Hurricanes Katrina and Rita through Act 8 of the First Extraordinary Session of 2005. Act 8 of the First Extraordinary Session of 2005 expanded the membership, duties, and responsibilities of CPRA and charged the new authority to develop and implement a comprehensive coastal protection plan, consisting of a master plan and annual plans. CPRA's mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration master plan.

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The Louisiana Watershed Initiative was established by Governor John Bel Edwards' Executive Order Number JBE 2018-16. In support of Louisiana Senate Resolution 172, the Initiative's mandate is to develop and implement a statewide, watershed-based floodplain management program through close collaboration and coordination of the Secretaries and Executive Directors of LDWF, DOTD, GOHSEP, OCD, and CPRA, operating as the Council on Watershed Management.

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List of Abbreviations

| | |
|---------|---|
| APA | American Planning Association |
| ASCE | American Society of Civil Engineers |
| ASFPM | Association of State Floodplain Managers |
| ASLA | American Society of Landscape Architects |
| BCA | Benefit-Cost Analysis |
| CPRA | Coastal Protection and Restoration Authority |
| CRS | Community Rating System |
| CSAP | Coastal Science Assistantship Program |
| DOTD | Department of Transportation and Development |
| EMI | Emergency Management Institute |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| GIS | Geographic Information System |
| GOHSEP | Governor's Office of Homeland Security and Emergency Preparedness |
| H&H | Hydrologic and Hydraulic |
| HMA | Hazard Mitigation Assistance |
| HMGP | Hazard Mitigation Grant Program |
| HUD | U.S. Department of Housing and Urban Development |
| ICC | Increased Cost of Compliance |
| LA SAFE | Louisiana's Strategic Adaptations for Future Environments |
| LDEQ | Louisiana Department of Environmental Quality |
| LDNR | Louisiana Department of Natural Resources |
| LDWF | Louisiana Department of Wildlife and Fisheries |
| LFMA | Louisiana Floodplain Management Association |
| LiDAR | Light Detection and Ranging |
| LMI | Low to Moderate Income |

Parish Flood Risk and Resilience Capability and Capacity Assessment

| | |
|--------|---|
| LOMR | Letter of Map Revision |
| MMC | Multi-hazard Mitigation Council |
| MOU | Memorandum of Understanding |
| NFIP | National Flood Insurance Program |
| NGO | Non-Governmental Organization |
| NHMA | Natural Hazard Mitigation Association |
| NIBS | National Institute of Building Sciences |
| NOAA | National Oceanic and Atmospheric Administration |
| NWS | National Weather Service |
| OCD | Office of Community Development |
| RFP | Request for Proposal |
| RL/SRL | Repetitive and Severe Repetitive Loss |
| SAL | State Applicant Liaison |
| SI/SD | Substantial Improvement/Substantial Damage |
| SOP | Standard Operating Procedure |
| TAC | Technical Advisory Committee |
| USACE | U.S. Army Corps of Engineers |

1.0 Background and Context

The Coastal Protection and Restoration Authority (CPRA) Flood Risk and Resilience Program includes thousands of recommended residential elevations, residential acquisitions, and non-residential floodproofing actions across coastal Louisiana parishes. The goal of this report and the underlying assessment is for CPRA and other state partners to better understand the capability and capacity of coastal and near-coastal parishes to implement nonstructural mitigation projects and related flood risk reduction policies at this scale. For the purposes of this report, nonstructural projects are those currently eligible through the Flood Risk and Resilience Program, which include projects to reduce risk to the existing building inventory through elevating, acquiring, or floodproofing structures. These projects are distinct from structural projects, such as levees.

Additionally, the Louisiana Watershed Initiative seeks to understand the state's capacity and capabilities to implement other flood risk reduction related projects, as well as flood risk management related policies and programs. This effort provided an opportunity to test and pilot a capacity and capability assessment and obtain stakeholder feedback for broader statewide implementation.

With input from several other state agencies, including the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), the Office of Community Development (OCD), the Department of Transportation and Development (DOTD), and the Department of Wildlife and Fisheries (LDWF), CPRA and its consultants conducted a capability and capacity assessment with 24 parishes during the spring and summer of 2018, and the results, recommendations, and potential opportunities for improvement therefrom are presented in this document.

1.1 The Challenge of Current and Future Flood Risk

CPRA was established by the Louisiana Legislature in response to Hurricanes Katrina and Rita (Figure 1) through Act 8 of the First Extraordinary Session of 2005 to improve statewide resilience in the face of future disasters and restore, when possible, coastal areas that continue to suffer from sea level rise and the aftermath of past disasters. This act charged the new authority to develop and implement a comprehensive coastal protection plan, consisting of a master plan to be revised every five years and annual plans in order to continually adapt to present day problems and integrate new technologies and approaches. Act 44 of the 2018 Regular Session amended this to require a new master plan every six years, instead of five.

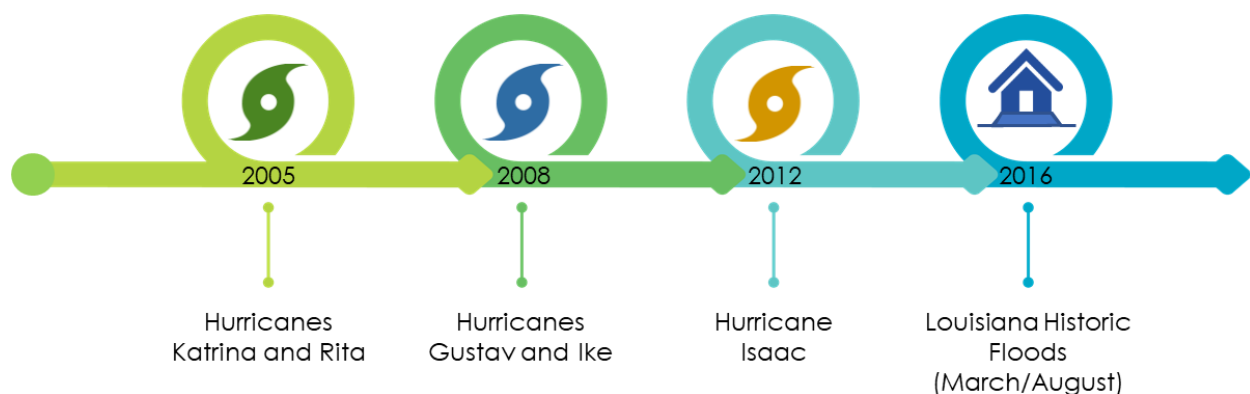


Figure 1: Timeline of Recent Major Flood Events in Coastal Louisiana

CPRA developed a master plan for the state in 2007, 2012, and 2017. The master plan prioritizes both near-term and long-term projects that increase the sustainability of coastal Louisiana over the next 50 years. More specifically, the master plan recommends projects that are best able to build and maintain land and reduce coastal storm surge-based flood risk. As part of the 2017 Coastal Master Plan, CPRA made significant advancements to the Flood Risk and Resilience Program, which focuses on nonstructural project recommendations and related flood risk reduction policies.

Since 2005, many coastal Louisiana parishes have been implementing nonstructural measures using post-disaster funding from the Federal Emergency Management Agency (FEMA) and the United States Department of Housing and Urban Development (HUD). For example, a November 2014 Louisiana Katrina/Rita Road Home Program monthly report stated that 32,409 applicants had received elevation disbursements (OCD, 2014). While existing disaster mitigation programs are vital, they are limited and often only available after a major presidential disaster declaration. The Multi-hazard Mitigation Council (MMC), a council of the National Institute of Building Sciences (NIBS), reports that every federal dollar spent on pre-disaster hazard mitigation saves \$6 in flood damages (Porter et al., 2017). As the costs of rebuilding after disasters mount, coastal communities need better resources to plan for future storms before they occur. To advance coastal Louisiana's pre-disaster nonstructural mitigation planning, the Flood Risk and Resilience Program takes a holistic and comprehensive approach to flood risk reduction and increased community involvement through the development of a coast wide mitigation strategy for future flood risk conditions.

In August 2016, a slow-moving pressure system brought heavy rainfall of 20 to 30 inches to parts of southeast Louisiana (Figure 2). The resulting floods caused closures on both Interstate 10 and Interstate 12 for several days and flooded thousands of homes and businesses across portions of the Baton Rouge and Hammond Metropolitan Areas. A final tally of the number of homes and businesses flooded has not been compiled, but estimates range from 50,000 to 75,000 structures (NWS, n.d.). The National Oceanic and Atmospheric Administration (NOAA) and partner scientists with World Weather Attribution conducted a rapid assessment of the role of climate on the 2016 heavy rain event and concluded that climate change had a measurable impact on this type of rain event. Models indicate that there is significantly more rain per event than in 1900. Extreme rain events of the magnitude of the August 2016 downpour in Louisiana are at least 40% more likely to occur and be 10% more intense (Allen, 2016; van der Wiel, et al., 2016).

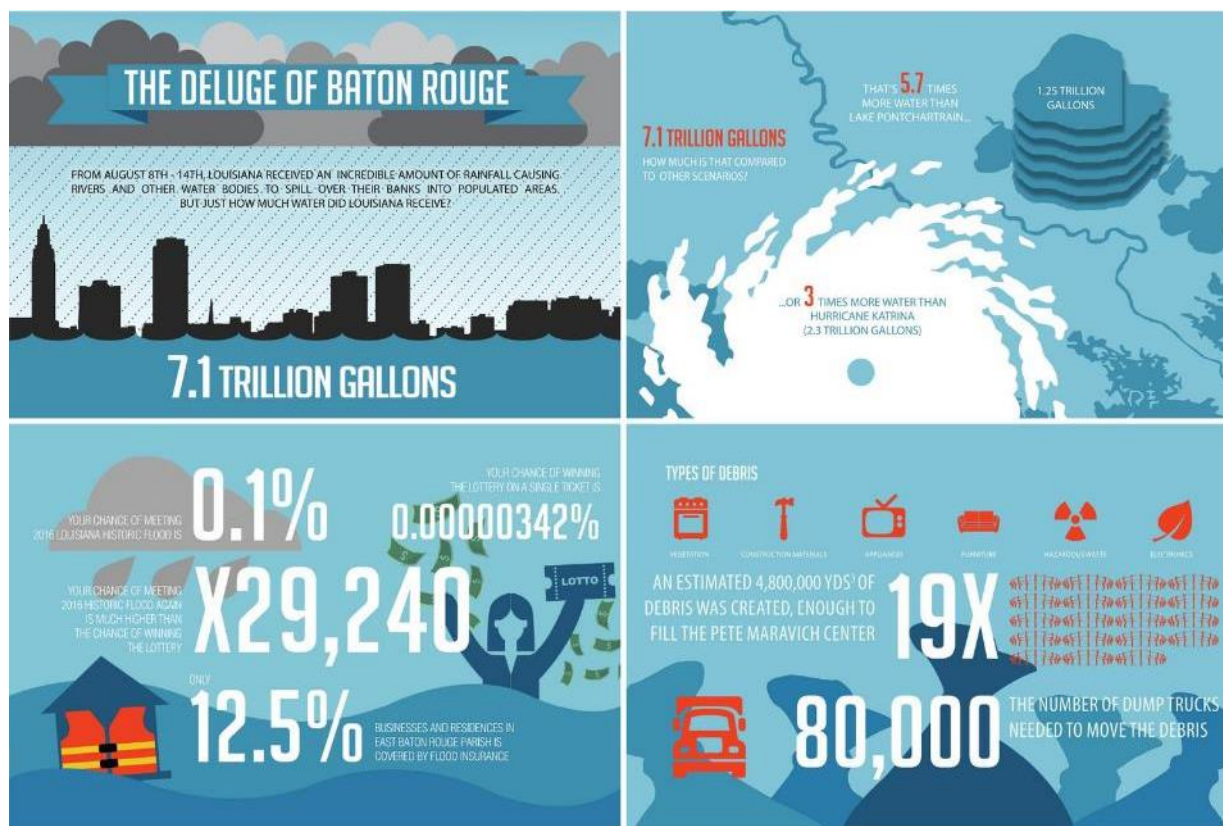


Figure 2: Louisiana August 2016 Historic Floods (ASLA, 2017)

The 2017 Coastal Master Plan also illustrates that coastal Louisiana's landscape and flood risk are changing due to such factors as sea level rise, subsidence, and others (Figures 3 and 4). For instance, Louisiana has lost more than 2,000 square miles of land since the 1930s, (Beck et al., 2017), and this loss is projected to continue. The master plan's most recent predictions show that, without additional protection or restoration actions, Louisiana stands to lose 2,250 to 4,100 additional square miles of land over the next 50 years. This could mean an approximate ten-fold increase in economic damage due to coastal flooding in comparison to today, or \$12.1 to \$19.9 billion in expected annual damage in 50 years.

Implementation of the 2017 Coastal Master Plan can greatly reduce this risk. The recommended protection and restoration projects in the master plan have the potential to reduce expected losses by approximately \$150 billion over the 50-year life of the plan. Nevertheless, even with implementation of master plan projects, CPRA expects a three-fold increase in economic damage due to coastal flooding (\$3.7 to \$7.9 billion in expected annualized damage in 50 years) in comparison to today (\$2.7 billion expected annualized damage).

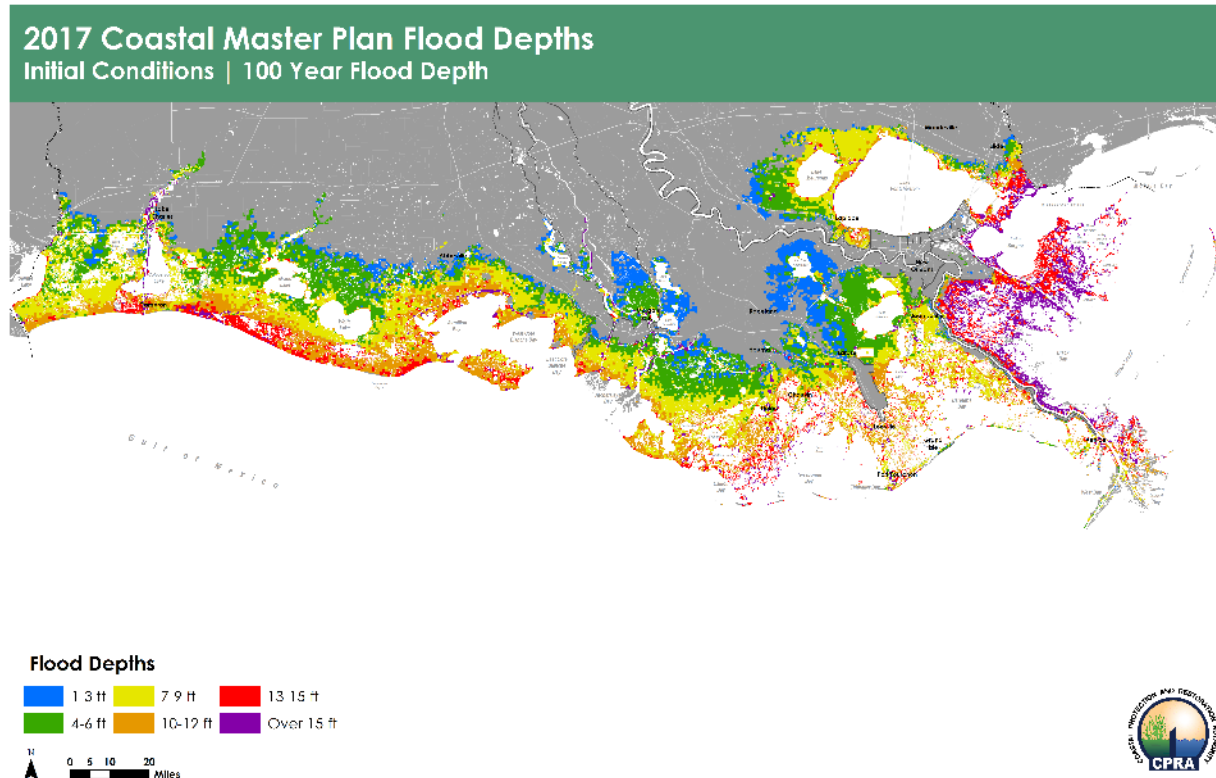


Figure 3: Initial Conditions 100 Year Flood Depths

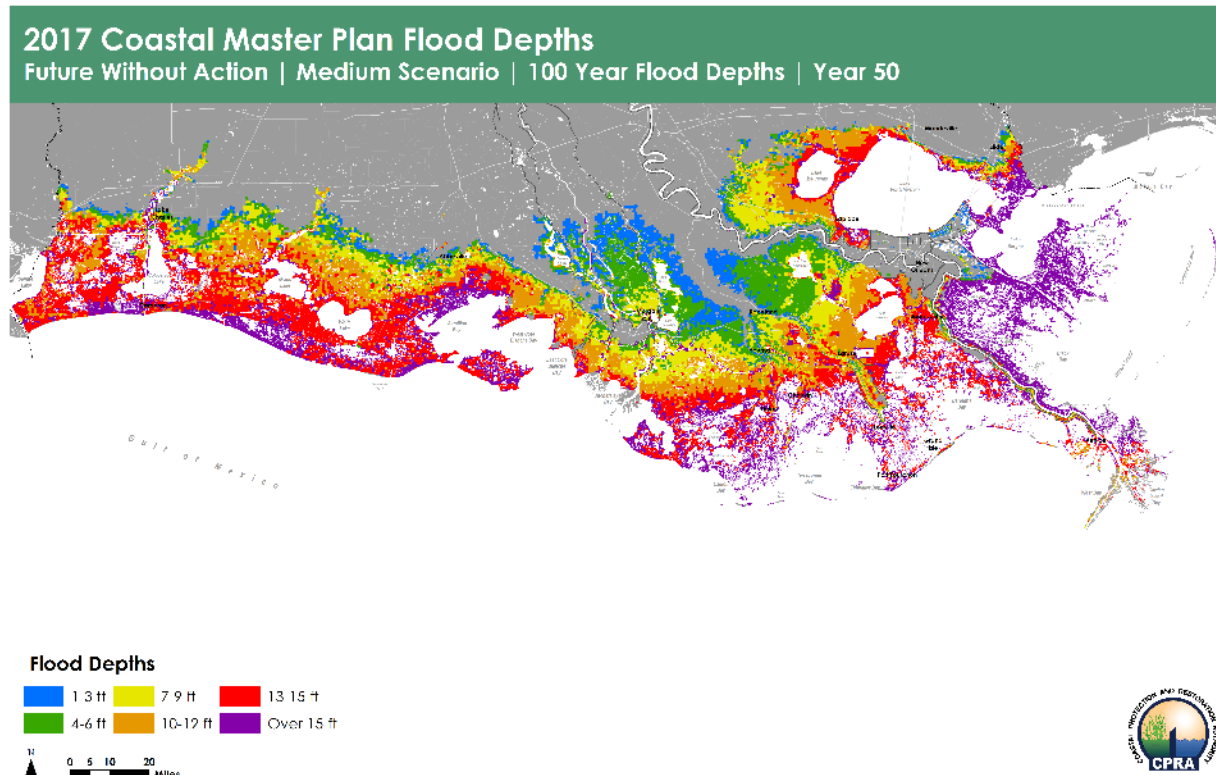


Figure 4: Future Without Action 100 Year Flood Depths (Medium Scenario, Year 50)

These estimations underscore the urgent need for the state of Louisiana to quickly move forward with the implementation of the master plan and advance the recommended restoration, structural protection, and nonstructural risk reduction projects that will help to create a more sustainable landscape and more resilient communities. Additionally, recent flood events demonstrate that flood waters, coastal or riverine, do not obey jurisdictional boundaries. Louisiana needs coordinated planning across state and local agencies and jurisdictions to comprehensively reduce future flood risk. It will take an unprecedented effort by the government, coastal communities, non-profits, universities, and the private sector to improve the sustainability of our coast.

In spite of broad scientific consensus that climate-related changes are occurring and increasing flood risk across the state of Louisiana, it is highly uncertain exactly how these impacts will unfold in the future, given the complex and ever-changing ecological, built environment, and social dynamics (Berke and Stevens, 2016). Cultivating community resilience to future flood risk, particularly accelerating sea level rise, demands both capability (skills, cooperation, willpower, and ability to self-organize) and capacity (tools and resources) to contend with an uncertain future (Adger et al., 2005; Walker and Salt, 2012).

Despite these challenges, CPRA continues to make significant progress. Since 2007, CPRA has built or improved approximately 297 miles of levees, benefited over 41,300 acres of coastal habitat, secured approximately \$20 billion in state and federal funding for protection and restoration projects, moved over 150 projects into design and construction, constructed projects in 20 parishes, and constructed 60 miles of barrier islands and berms. Over 20 projects will begin or continue construction during Fiscal Year 2019, including 10 protection projects and 11 restoration projects, representing a total state investment of nearly \$289 million.

There is much work to be done, but with a clear understanding of the challenges at hand and of the needs to be addressed, Louisiana's coastal communities can continue to adapt and thrive.

1.2 The Flood Risk and Resilience Program

Developed as part of the 2017 Coastal Master Plan, CPRA's Flood Risk and Resilience Program is a state-led, coast wide, nonstructural flood mitigation program for coastal Louisiana parishes (Figure 5). CPRA developed a risk reduction strategy that focuses state leadership and funding toward areas of high risk, while enabling parishes to play a lead role in implementing projects and selecting specific structures to be mitigated. The program is intended to take advantage of nonstructural project funding outside of federal grant programs to maximize flexibility and to speed the implementation of projects that advance comprehensive coastal flood risk reduction goals.

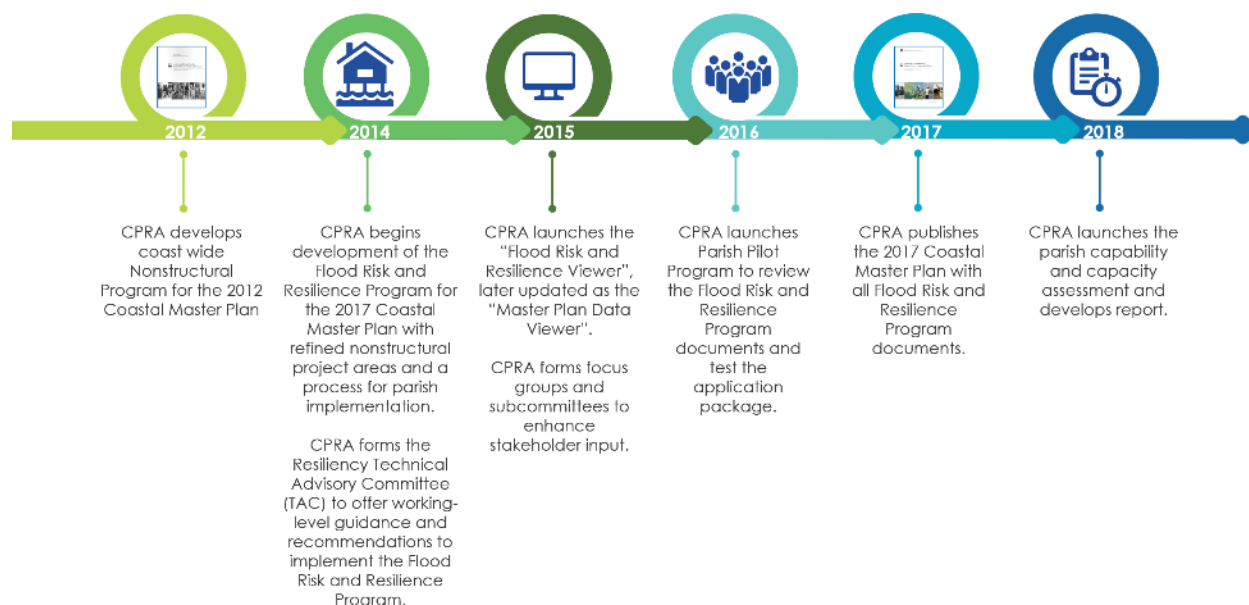


Figure 5: Timeline of the Flood Risk and Resilience Program

Flood Risk and Resilience Program Mission:

- Reduce flood risk in coastal Louisiana communities through residential elevation, residential acquisition, and non-residential floodproofing projects
- Prioritize risk reduction measures for communities that are physically and socio-economically vulnerable to coastal flooding
- Implement nonstructural risk reduction projects and support policies that promote wise development in Louisiana's coastal zone
- Help residents increase their resilience to coastal flooding through broader initiatives that promote education about current and future flood risk, awareness of and access to available resources to reduce risk, and other outreach efforts

Flood Risk and Resilience Program Objectives:

- Formulate nonstructural project recommendations
- Develop a program to implement nonstructural projects
- Advance flood risk awareness
- Promote greater interagency coordination
- Provide resources and outreach materials
- Build local capability and capacity

Given limited resources, CPRA seeks to invest available funding efficiently and effectively and to generate as much positive impact as possible. The Flood Risk and Resilience Program is designed to fill existing gaps, offer greater flexibility to parish grant administrators, streamline programmatic requirements, encourage wider participation from vulnerable communities, and focus on areas of critical need and greatest storm surge-based flood risk.

As part of the 2017 Coastal Master Plan, the Flood Risk and Resilience Program recommended 32 nonstructural projects that include the mitigation of more than 26,000 structures at a cost of \$6 billion over the next 50 years (Figure 6). It should be noted that these are general

recommendations that do not address specific structures and that all project implementation will be voluntary.

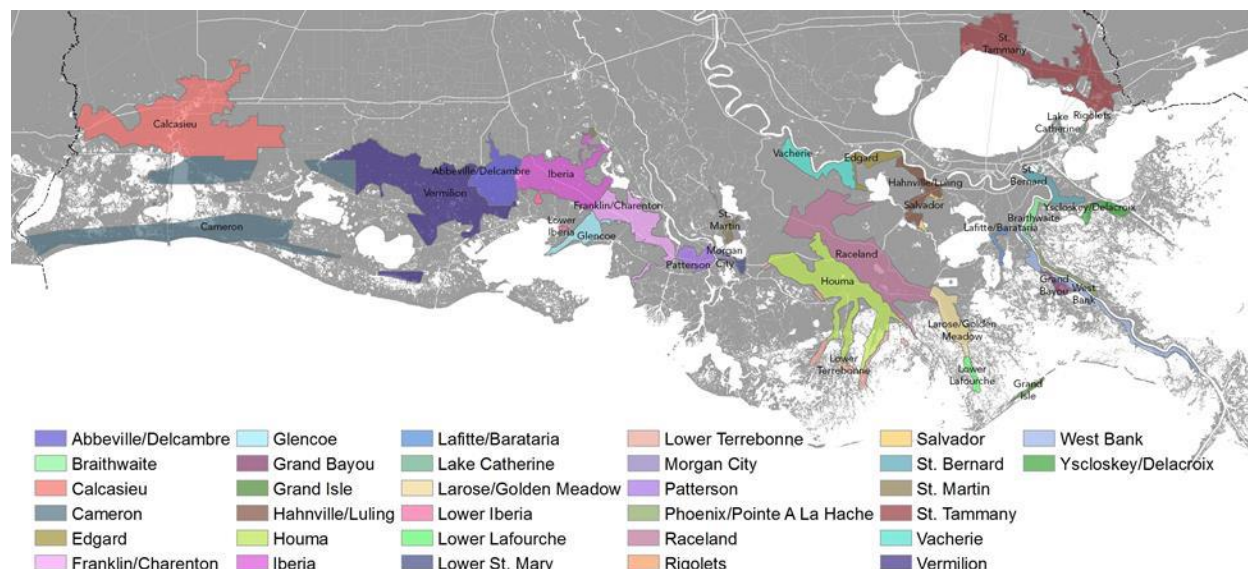


Figure 6: 2017 Coastal Master Plan Nonstructural Project Recommendations

In preparing this report, CPRA sought to better understand coastal parishes' existing capacities and capabilities to implement the recommended nonstructural mitigation projects as well as related policies, ordinances, and plans. Further, in coordination with the Louisiana Watershed Initiative – introduced in detail below – CPRA intends to use the findings of this report to examine existing relationships with and between parishes and state and federal agencies involved with nonstructural mitigation projects to inform the future development of the Louisiana Watershed Initiative, the Flood Risk and Resilience Program, and other possible future state initiatives.

Structural measures focus on reducing the probability of flooding through measures, such as levees and floodwalls.

Nonstructural measures focus on reducing the consequences of flooding and can be physical or nonphysical. Physical nonstructural measures recommended by the Flood Risk and Resilience Program are applied directly to buildings and include floodproofing, elevation, and acquisition. Nonphysical nonstructural measures are geared toward guiding a community's actions and can include things like land use regulations, flood insurance policies, and zoning.

(USACE, n.d.)

1.3 The Louisiana Watershed Initiative

In the wake of the 2016 floods, Louisiana state agencies – collectively referenced, in this report, as “the State” – recognized that robust statewide resilience to current and future flood risk requires coordination across jurisdictions and between actors within the same watersheds. As the Phase I Report outlines, Louisiana’s “different jurisdictions have historically performed floodplain management activities in a largely uncoordinated fashion. Even departments within those jurisdictions (such as city/parish planning and zoning departments or public works) often independently regulate or undertake activities that affect the same watersheds, inadvertently failing to recognize interdependencies and the cascading impacts of those activities” (OCD et al., 2018: II-9). For example, current development practices can lead to drastically increased runoff; this can lead to increased flood risk, both in magnitude and extent of flooding, of adjacent properties and downstream of the development. Areas considered to have low flood risk in prior years can find themselves flooding frequently due to land use practices outside of their jurisdiction (ibid: I-2).

To address the need for improved interagency coordination, from November 2017 to February 2018, four cooperating state agencies investigated the development of a statewide, comprehensive Louisiana Watershed Initiative that will “allow the state and its various jurisdictions and political subdivisions to coordinate at a watershed level and manage floodplains consistently using best practices across [the state]” (ibid: II-9) (Figure 7). This investigation culminated in the Phase I Program Development Research and Evaluation Report completed in May 2018, with findings developed in collaboration with stakeholders and presented in the form of recommendations on governance structures, planning processes for watershed-based plans, and more.

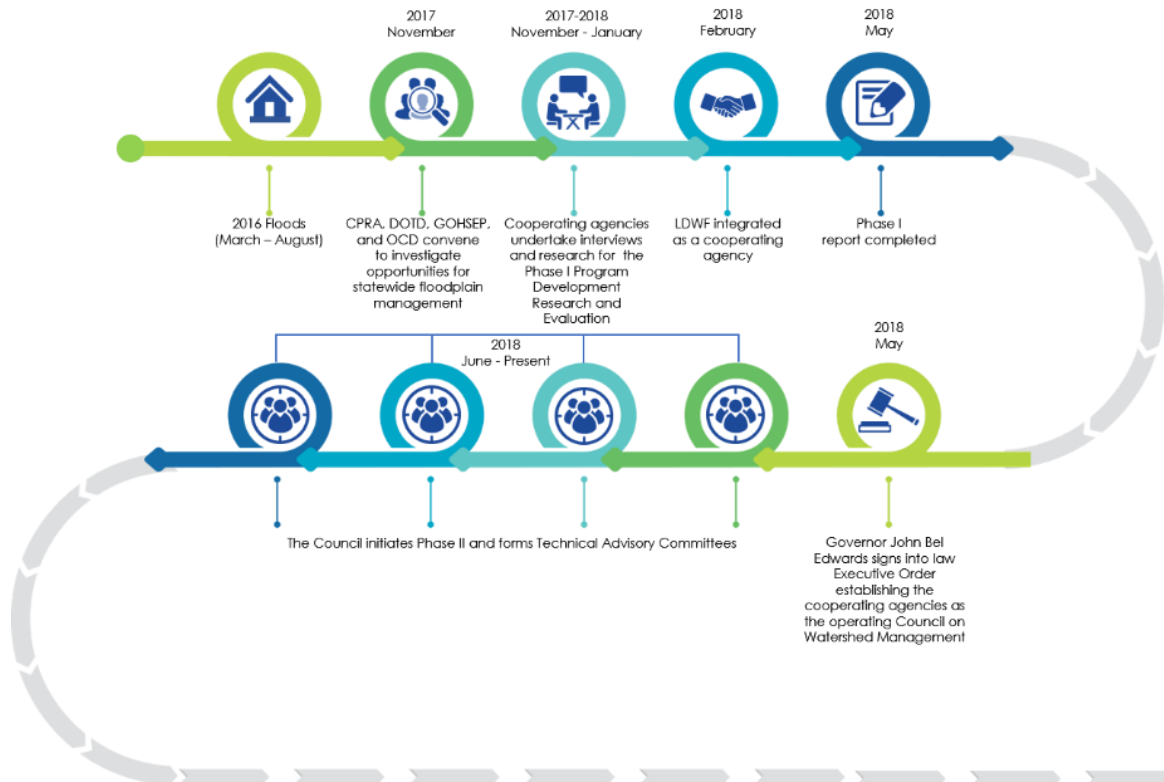


Figure 7: Timeline of the Louisiana Watershed Initiative

The cooperating agencies, consisting of CPRA, DOTD, GOHSEP, and OCD – along with LDWF, who was integrated in as a cooperating agency in February 2018 – were, through the Governor's Executive Order JBE 2018-16 on May 29, 2018, formalized as the Council on Watershed Management (Council) to oversee the development and implementation of the Louisiana Watershed Initiative. Alongside a chairman and co-chairman, who are to be selected annually from among the five state agencies comprising the Council, members of the core agencies are in the process of convening a series of engagements on various topic areas to leverage the talent and knowledge across the state to develop the program effectively – an effort which is unprecedented in the state of Louisiana.

The Phase I report outlines recommended key initiatives within six strategic areas that have been identified as essential to effective floodplain management in the state of Louisiana. These recommendations are accompanied by an implementation roadmap of specific actions that should be undertaken within assigned timeframes, as follows: immediate (catalyst actions), within the next six months (Phase II), within the next year (Phase III), within two to three years, and within four to five years.

Guiding principles of the Watershed Initiative:

- Ecosystem services maximized through the natural and beneficial functions of the floodplain go hand in hand with effective flood risk management
- The root of all wise decision-making is accurate, complete, transparent, and accessible data and information
- Engagement, trust building, and partnership toward collective action are necessary to maximize program effectiveness
- Local citizens need to be empowered and supported to meet the demands of our changing flood risk context
- The State should set the bar for sound flood risk management across Louisiana
- Sustainable sources of funding are needed to implement and maintain sound flood risk management practices across the state
- Existing sources of funding can be stretched and leveraged more efficiently if put toward a common goal

2.0 Assessment Overview

2.1 Objective

Capability - The presence of skills and authority required to accomplish a specific objective.

Capacity - The amount of resources appropriate and available to accomplish a specific scale objective (i.e., staff, funding, equipment). The parish capacities measured in the assessment and referenced in this report are differentiated from "adaptive capacity," which refers to a community's broader ability to adapt to changing and uncertain conditions over time (i.e., the impacts of climate change).

CPRA's Flood Risk and Resilience Program and the Louisiana Watershed Initiative – as well as other ongoing state-driven initiatives, such as OCD's Louisiana's Strategic Adaptations for Future Environments (LA SAFE) – recommend nonstructural mitigation projects, policies, and other nonstructural tools to improve the resilience of coastal Louisiana. Through these various state programs, nonstructural mitigation planning is conducted in close coordination with local parishes, and nonstructural project implementation would be led by local parishes through the Flood Risk and Resilience Program.

As CPRA has moved forward with program planning for the implementation of nonstructural mitigation projects outlined in the Flood Risk and Resilience Program, the agency has determined it needs to better understand the existing capacities and capabilities of parishes to implement nonstructural projects, as well as the various strengths or weaknesses parishes may have in implementing these and other resilience-related policies, ordinances, and plans. For example, during CPRA's Parish Pilot Project (conducted in the spring of 2017), which tested CPRA's nonstructural application process, one parish noted that their capacity to implement a successful application would be highly dependent upon the scope of the application. If the application were to include a large number of properties, additional capacity at the parish level would be required. Further, the parish noted that a parish office regularly manages competing interests and would not be solely focused on nonstructural mitigation projects; there would be other projects and priorities competing for staff time that could possibly slow the nonstructural program's progress. Given that this parish likely has a relatively high capacity for project implementation based on its past performance in similar projects, the parish's comments reinforced the importance of adequate capacity as a prerequisite to effective project implementation.

To better understand parish needs, CPRA coordinated with 24 coastal (or near-coastal) parishes to understand their strengths, needs, and concerns associated with implementing nonstructural projects and related resilience policies and programs. In addition to advancing CPRA's Flood Risk and Resilience Program, the assessment is also intended to support the Louisiana Watershed Initiative, which places a strong emphasis on identifying and building local capability and capacity to reduce flood risk. Specifically, the Louisiana Watershed Initiative Phase I Report identified the need to administer an assessment to "identify what assistance state agencies can and should provide in a targeted manner – financial, technical, or otherwise – and orient capacity building efforts accordingly," so as to ensure "provision equity" of resources, expertise, and access to programmatic opportunities across communities (OCD et al., 2018: IV-4). The outcomes of this assessment can be used to support the Council on Watershed Management to

develop and launch a Capability and Capacity Building Action Plan for parishes across the state, at the appropriate time, “with clear statewide capacity building goals, metrics, and accountability requirements” (ibid: IV-25). There is potential for the assessment process described herein to be improved upon and scaled up for use across the state in the future.

With this in mind, the objective of the assessment was to provide details about local conditions on the ground, including what resources and abilities parishes have available to implement recommendations from the 2017 Coastal Master Plan (specifically the Flood Risk and Resilience Program) and the Louisiana Watershed Initiative. This process was guided by the desire to better understand how the State can focus resources more effectively to align with what parishes need. Parishes are facing pressure at the local level from a variety of factors and forces. A detailed assessment could illuminate parish needs and help the State better focus its resources to relieve some of that pressure.

Assessment Objectives:

- Determine parishes' general and specific capability and capacity to implement Flood Risk and Resilience Program recommended nonstructural mitigation projects
- Determine parishes' general and specific capability and capacity to implement flood risk and resilience related policies, programs, and plans
- Provide insights on how CPRA and other state agencies – particularly those composing the Council on Watershed Management – can better support the needs of parishes in program development, project implementation, and policy alignment to mitigate the impacts of current and future flood risk

The recommendations detailed in Chapter 3.0 support existing and propose new efforts to leverage and coordinate actions across state agencies to increase the impact, effectiveness, and local relevance of any resource allocation.

2.2 Assessment Development and Participation

The assessment was developed and led by CPRA with support of the consulting firm Arcadis, national subject matter experts, and the state agencies who represent the Council on Watershed Management. CPRA embarked on the project with a list of questions carried over from the Flood Risk and Resilience Program development process, including questions relating to local awareness of the need for mitigation, staff, funding, mitigation history, policies and programs, federal policy, land use planning, parish mentorship, and relationships with institutes of higher education. Following a review of existing documents – including relevant elements of the 2017 Coastal Master Plan, the Flood Risk and Resilience Program, and the Louisiana Watershed Initiative – the team, consisting of CPRA and Arcadis staff, conducted extensive research on capacity assessment methodologies, particularly those relating to floodplain management and flood risk resilience. The team then developed a list of contacts known to guide and implement flood risk management related activities within each of the 24 parishes, drawing largely from lists developed by CPRA, GOHSEP, DOTD's Floodplain Management Office, and the Watershed Program Phase I Evaluation. The contacts came from a wide variety of disciplines, including floodplain and coastal zone managers, planning and zoning directors, hazard mitigation specialists, grants management officers, drainage engineers, public works professionals, and more.

In moving forward with the outreach process, the drafting and administering of the assessment, detailed post-assessment analysis, and the drafting of the report, the team engaged a panel of local and national subject matter experts, whose feedback was incorporated into the materials and approach both for the assessment and the final report. Members of the five state agencies composing the Council on Watershed Management also provided review and feedback to ensure alignment with the vision of the Louisiana Watershed Initiative and each agency.

The assessment targeted 24 coastal (or near-coastal) parishes that may be subject to storm surge-based flood risk over the next 50 years (based on model results from the 2017 Coastal Master Plan) (Figure 8). Given the Louisiana Watershed Initiative's ambitions for statewide capacity building for resilience, the assessment can also be considered as a pilot project that could be expanded to the rest of the state. The findings in this report are meant to serve as a foundation for continued future assessment and evaluation at various scales, involving iterative reflection and improvement on processes and desired outcomes, recurrent and expanding stakeholder collaboration, and deeper integration with existing and future programs and initiatives. This can provide necessary context for state agencies to continually evaluate and allocate resources for maximum benefit and suitability to local needs and to ensure that programs evolve to adapt to changing circumstances. In the long term, this assessment, and any future iterations, can help inform the Louisiana Watershed Initiative's ambitions for a five-year Capability and Capacity Building Action Plan and help refine the Flood Risk and Resilience Program.

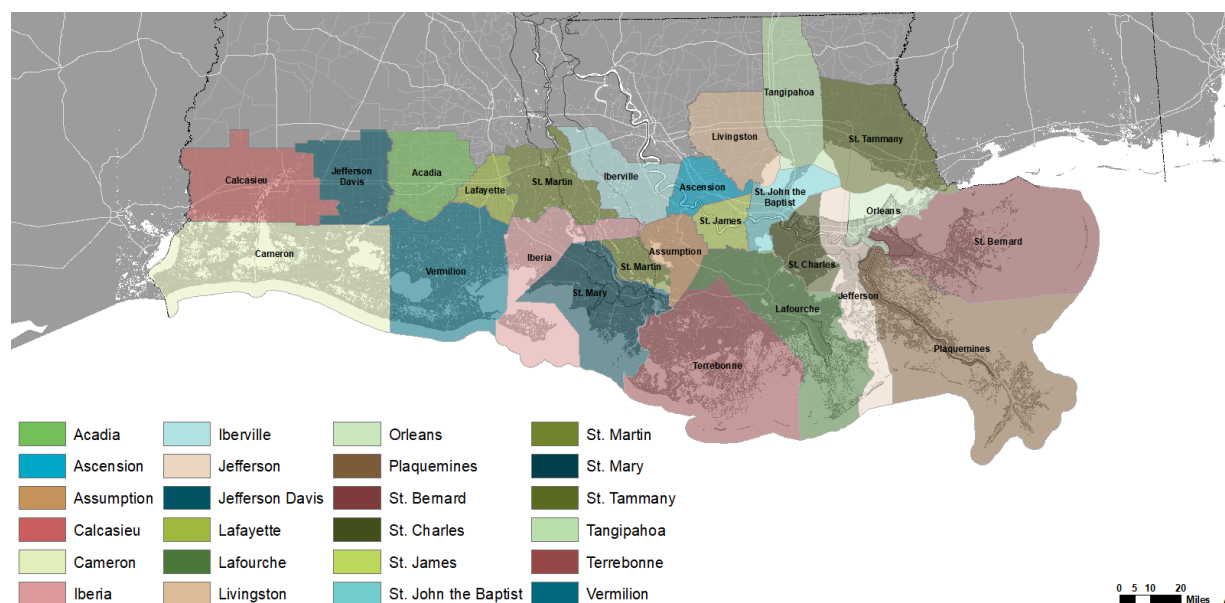


Figure 8: Map of Coastal or Near-Coastal Parishes

2.2.1 Three-Part Process

The assessment consisted of a three-part engagement process to better understand parish strengths and needs (Figure 9). Each part played a specific role. First, a comprehensive online survey collected facts about existing conditions in the parishes for cross-comparison and aggregation. Second, a series of in-depth interviews with parish staff provided more detail by obtaining greater perspective and context. Finally, three in-person workshops allowed for group dialogue and consensus-building across parishes. Through this process, the team aggregated key challenges and worked with participants to clarify root causes and develop

recommendations for addressing those challenges. These findings form the foundation for this report. The three key components of the assessment are described in further detail below.



Figure 9: The Three-Part Capability and Capacity Assessment Process

1. **A comprehensive online survey** collected facts about existing capacity and capabilities of the parishes in six key topic areas. Included were requests for needed support within those topic areas. The team drafted the survey in March 2018, and participants contributed to the survey from April to June 2018. The survey incorporated multiple question-types, including multiple choice, rating, and short and long open-text answers, and required coordination across multiple parish staff and departments to complete.¹ The survey included the following sections and subsections:

- 1.0 Staff
 - 1.1 Staff for Nonstructural Mitigation Projects
 - 1.2 Staff and Staff Coordination Related to Flood Risk Reduction Plans, Policies, and Programs
- 2.0 Funding
 - 2.1 Availability and Scope of Funding for Residential Elevation, Residential Voluntary Acquisition, and Non-residential Floodproofing Projects
 - 2.2 Grant Management Capacity
 - 2.3 Availability and Scope of Funding for Other Resilience Policies and Programs
- 3.0 Mitigation History
 - 3.1 Local Awareness of Flood Risk and Planning and Mitigation Needs
 - 3.2 Mitigation History
 - 3.3 Project Maintenance

¹ For the purposes of this report, parishes who completed the survey are referenced and counted as individual “respondents,” though surveys were most often completed by multiple cooperating parties within the parish to submit a single parish-specific survey.

- 4.0 Flood Damage Prevention Policies and Programs
 - 4.1 Flood Risk Reduction Plans and Policies
 - 4.2 Public and Political Support and Incentives
 - 4.3 Implementation of Flood Risk Management Standards
- 5.0 External Relations
- 6.0 Data Gathering and Maintenance

A template for the survey is provided in Appendix A.

2. **Semi-structured phone interviews** complemented the contents of the survey and provided further qualitative depth and local context to the survey responses. Questions included in the interviews were more opinion-based than those included in the survey and, therefore, considered to be better communicated and understood through open dialogue. The interviews opened with an overarching introduction to CPRA's Flood Risk and Resilience Program and the Louisiana Watershed Initiative followed by 25 scripted questions. Interviewees received interview questions in advance, and many came prepared with written answers that allowed for further discussion and inquiry.

Interview questions are included in Appendix B.

3. **Three in-person multi-parish workshops** helped build group consensus around key challenges and potential solutions. The primary objectives included the following:
 - 1) Confirm, discuss, and refine the findings from the interviews and survey
 - 2) Prioritize and build group consensus around key challenges
 - 3) Develop and consolidate recommendations based on the identification of root cause issues and possible solutions
 - 4) Create a stronger set of peer relationships among parishes based on similar challenges, proximity, capacity, and/or shared goals and aspirations

The workshops involved open discussion and brainstorming. CPRA and Arcadis staff also facilitated group exercises within the workshops to prioritize key challenges and potential solutions, as well as to brainstorm root causes to existing challenges and new potential solutions. Challenges and potential solutions were categorized in a slightly modified approach to the categories from the survey based on feedback from the survey and interviews.

The results of these exercises, the workshop agenda, and supporting materials are contained in Appendix C.

All 24 of the targeted parishes participated in the assessment and engagement process in some way. A total of 83% of parishes (20 out of 24) participated in the survey. Fourteen of 24 parishes submitted complete, or almost complete, surveys. Another six parishes partially completed their surveys. Twenty-two out of 24 parishes (92%) participated in interviews. Twenty-one out of 24 parishes (88%) had at least one staff member attend one of the workshops – nine parish staff attended on June 5th in Covington, 14 parish staff on June 6th in Lafayette, and 12 parish staff on June 7th in Destrehan (Figure 10).

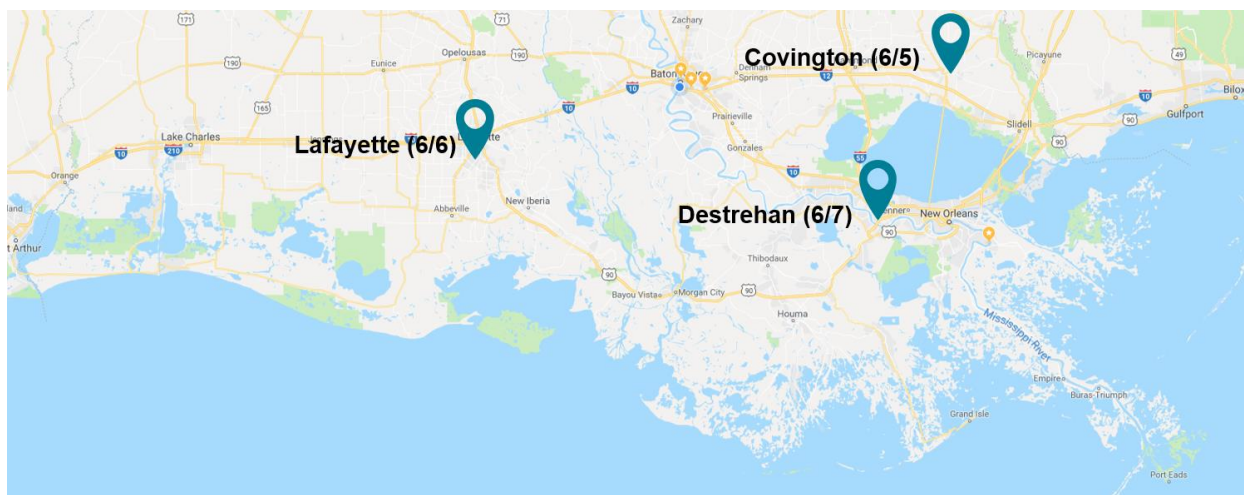


Figure 10: Parish Workshop Dates and Locations

The assessment engaged:

- Permitting or planning & zoning directors, supervisors, and/or regulatory administrators
- Floodplain managers and/or administrators
- Coastal zone managers and/or administrators
- Coastal and/or drainage engineers and contractors
- Hazard mitigation specialists and/or other program managers
- Grant management officers, directors, and/or analysts
- Community development directors and/or analysts
- Parish administrative officers
- Emergency preparedness and homeland security directors
- A levee district official
- A watershed coordinator
- Building code officials
- Community Rating System (CRS) specialists

2.3 What We Heard

Highlights from the assessment are summarized below and illustrated in figures, by section. More detailed selections of survey, interview, and workshop results recommended by participants can be found in Appendices A, B, and C, respectively. It should be noted that, because the survey was voluntary, there is some variation in the number of responses. Further, each parish received only one survey, so each parish was only represented in each survey question once by one or multiple chosen parish representative(s).

2.3.1 Staff

The single highest priority challenge participants identified across topic areas was having too few staff with many assorted responsibilities. They shared that this most heavily affects capacity and capability to implement flood risk related projects, programs, and policies. Participants

shared the perspective that a lack of local budget availability and lack of public support to increase funding for staff results in many competing duties for which civil servants are responsible. Further, despite there being many programs available to increase training and skillsets, competing responsibilities and time constraints can leave staff unavailable or underfunded for continued training and skill enhancement. For example, one participant shared that local floodplain managers often must take on multiple responsibilities which would not normally fall within their role, such as advising property owners on substantial damage and increased cost of compliance (ICC) through the National Flood Insurance Program (NFIP), where this is traditionally the insurance provider's role.

Participants expressed that this represents both a local and state need to prioritize funding for flood risk reduction-related staff support, and points to a broader need for outreach and education to make elected officials and members of the public aware of the role these staff play as stewards for risk reduction across the state. More on outreach and education is provided in Section 2.3.5 below.

On average, survey respondents indicated four staff members per parish are responsible for supporting nonstructural project implementation (Figure 11). An average of 31% of staff time is typically dedicated to related activities (Appendix A, 2.2). Additionally, six out of 17 survey respondents indicated their parish uses contract consultants for this purpose, though the majority of parish staff are civil servants. Respondents said that their parish could implement a far higher number of nonstructural projects using existing contract capacity over existing parish staff alone, indicating the importance of contract support for project implementation. It is worth noting that the interviews indicated that consultant capacity and capability is critically important to project success, and participants provided anecdotal evidence of past issues and successes as a result of variations in consultant capacity and capability. Participants pointed to the importance of consultants being personally invested in the work and having local knowledge, along with financial capacity and a willingness to support parish capability building.



"Everyone wears multiple hats."

"Pressure to reduce costs is affecting the consultant talent pool."

Participants indicated applicable parish staff generally have a high proficiency with FEMA Flood Insurance Rate Maps (FIRMs), especially staff working in hazard mitigation planning, building permitting, and local flood damage prevention policy enforcement (Appendix A, 2.2.5). By contrast, participants reported a fairly low proficiency with understanding future storm surge-based flood risk (such as determined by CPRA's Coastal Master Plan), especially staff working in building code enforcement, capital improvement planning, the NFIP Community Rating System (CRS), and review of local development and substantial improvement plans for compliance with flood damage prevention policy.

Most survey respondents (10 out of 14 parishes that responded to this question) indicated that their parish needs assistance in building capacity for grants management. This echoed discussions with parish staff during the interviews and workshops in which participants indicated a need for in-house assistance with grants management, in addition to data management and technical expertise. Some causes identified were that university students are not coming in ready, it is difficult to attract experienced people due to lack of funding, and there is high

turnover at both the state and local levels. Many participants also argued that the need for higher capability and capacity in grant management could be reduced through program streamlining, unification, trainings, and publications. More on this is described in Section 3.2.4, Objective 4.1 of this report.

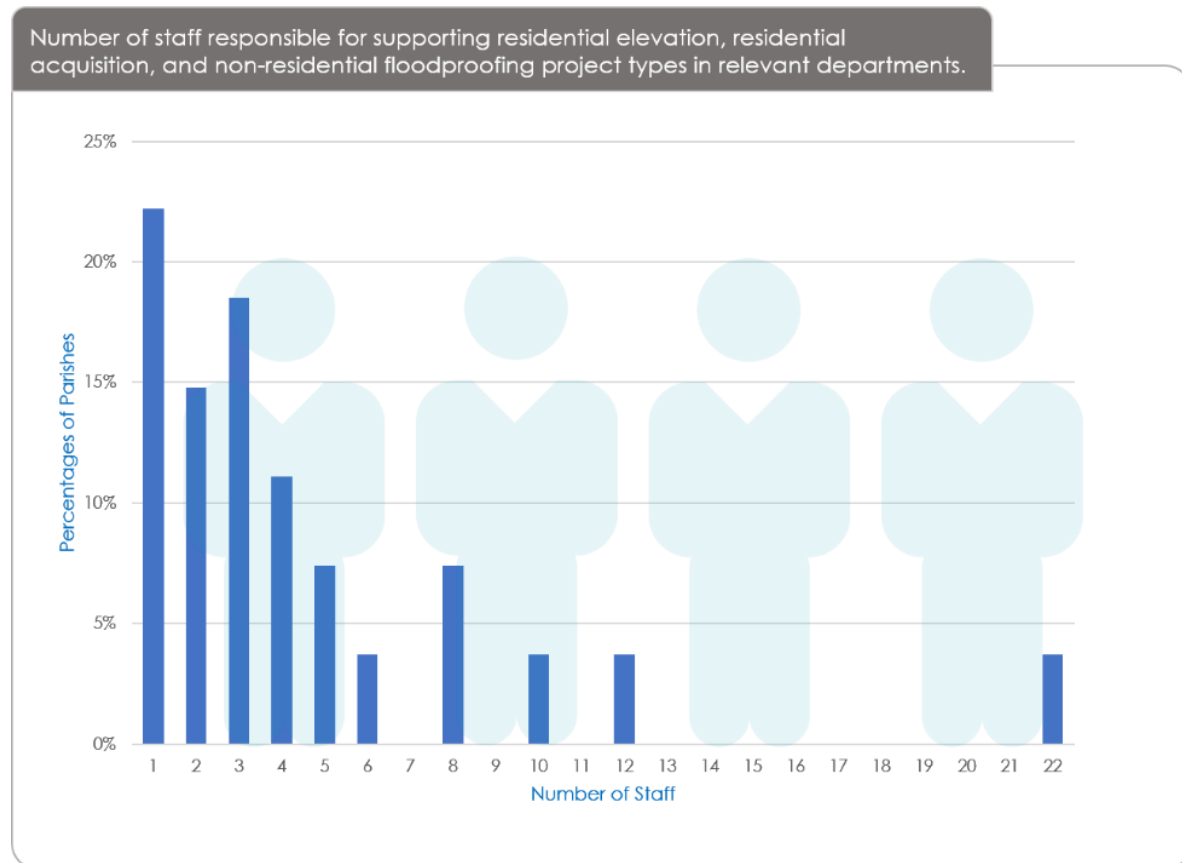


Figure 11: Number of Staff Supporting Nonstructural Projects

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address staffing challenges include:

- Supporting local staff capacity through regional/watershed-level staff support
- Providing state-facilitated trainings and outreach to local staff
- Producing and publishing standard operating procedures (SOPs) and templates (request for proposals (RFPs), forms, training presentations)

This report also recommends that the following strategies and options be investigated for appropriateness and feasibility:

- Piloting a university apprenticeship program to specifically support parishes and municipalities in their flood risk reduction-related activities
- Facilitating cross-training to build capacity
- Piloting a sub-state regional (e.g., watershed-based) suite of experts to form a "temp agency" for local staff support

2.3.2 Funding

Most participants expressed, with high priority, that local match is often not affordable for property owners. This feedback from the interviews and workshops was corroborated by the survey. Additionally, more than 50% of survey respondents anticipated a need for match funds for residential elevations (and 33% each for voluntary acquisitions and floodproofing projects), and 80% of respondents reported their parish has not identified a source for match funds (Figure 12). Only one parish survey reported an identified source for the match funding.

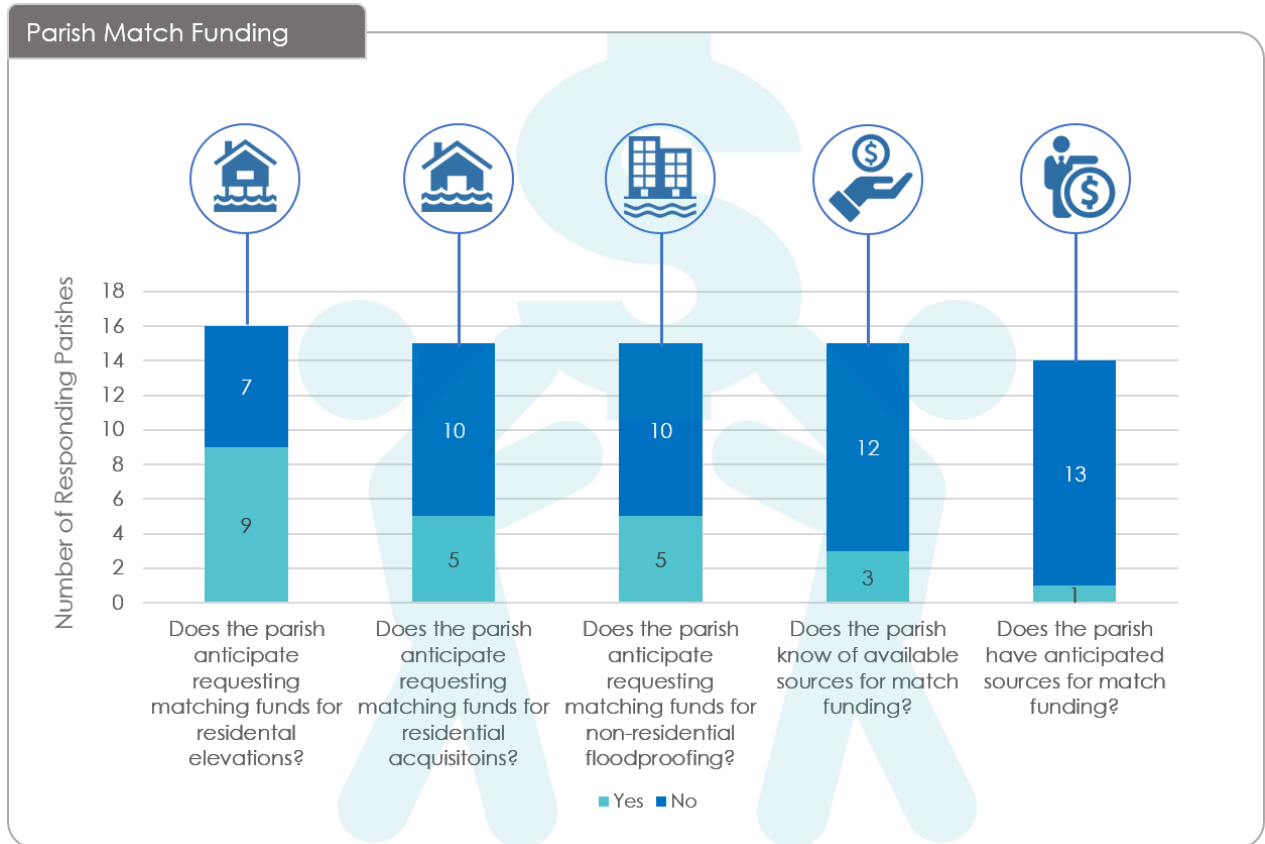


Figure 12: Parish Match Funding

As indicated in the survey, the average estimated amount of funding still needed and unidentified by parishes to implement projects far exceeds the average total cost estimate for currently planned projects. In the case of residential elevations, estimated funding still needed and unidentified on average exceeds 1,200% of current estimates for planned projects (Figure 13). This suggests the need for a consistent and reliable funding source to support long term flood risk reduction, which participants confirmed during workshops and interviews.

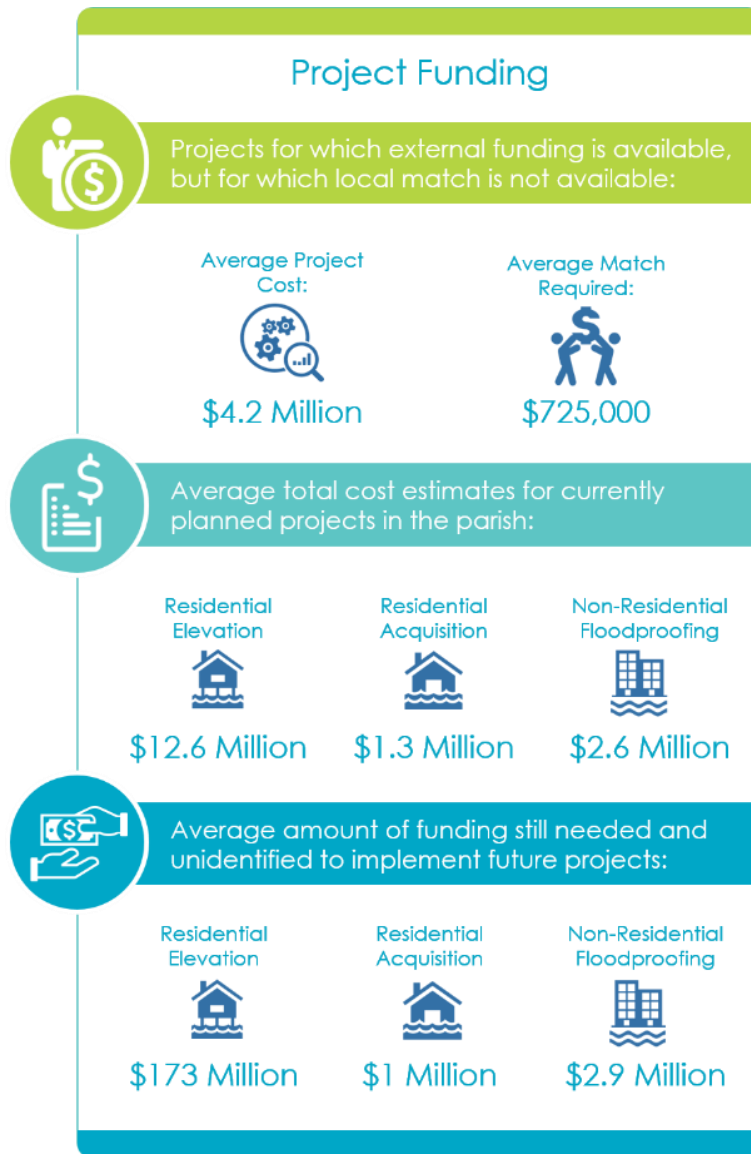


Figure 13: Parish Project Funding Amounts

Many participants expressed a need to align funding timelines with parish needs. Funding for elevations, for example, is needed coincident with other improvements, or immediately post-disaster when property owners are making repairs and renovations. More on possible programmatic features to facilitate capacity and capability to implement nonstructural projects is provided in Section 3.2.1, Objectives 1.3 and 1.4.

"A lot of people want to elevate but back out because of the cost of match."

"Too much is happening post-disaster."

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address funding challenges include:

- Investigating mechanisms to accelerate funding processes for all types of flood mitigation projects
- Investigating mechanisms to unify state grant program application and implementation processes, wherever possible
- Advocating for a block grant model for resilience funding
- Advocating for administration of regional elevation grants for rapid implementation after flooding

This report also recommends that the following strategies and options be investigated for appropriateness and feasibility:

- Establishing a dedicated, non-competitive multi-year (~five) or annual, proactive (state or federal) funding stream for flood risk reduction activities. For example, a possible use for funding may include:
 - A sliding scale for match support to property owners based on income, need, or other criteria

2.3.3 Projects

Participants from at least nine parishes stated that structural, drainage, and restoration projects are more cost-effective to meet the scale of the problem of current and future flood risk than elevation, acquisition, and floodproofing project types. Funding required by property owners for match and extensive application processes can serve as barriers to implementing residential elevations, although most participants reported elevations as important to flood risk reduction in their parish. Many participants raised concerns about voluntary acquisitions, citing reduction of the tax base and liability as major issues. Some were unsure about the effectiveness or need for floodproofing projects.

"The funding source tends to determine which structures are relevant or not, which can result in unmet need."

"The scale of the problem is huge; mitigating individual structures won't save the quality of life of the community in the long run."

Correspondingly, the majority of survey respondents prioritized residential elevation projects over both residential acquisitions and non-residential floodproofing project types. Residential acquisitions were the least prioritized (Figure 14).

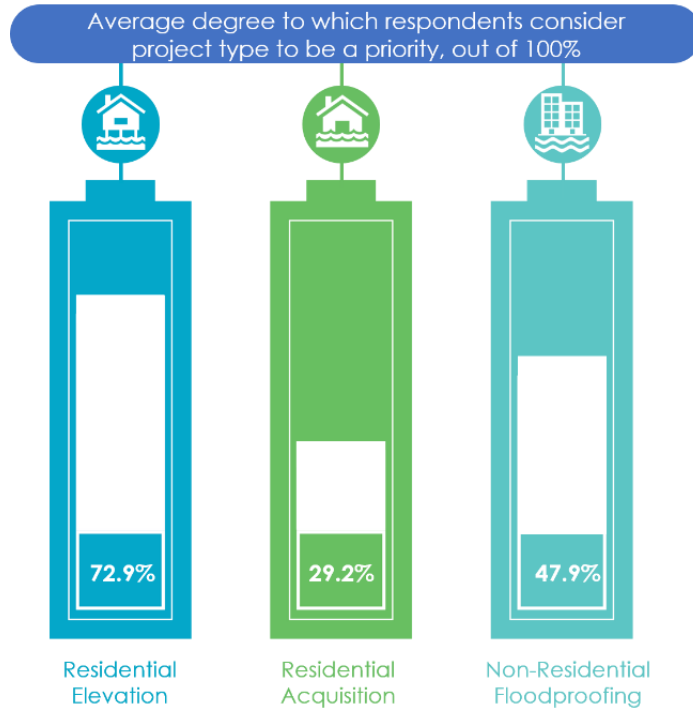


Figure 14: Parish Prioritization of Nonstructural Project Types

Eight survey respondents said that their parish implemented residential acquisition projects over the last five years, most of them involving 10 or fewer structures (Figure 15). Four respondents indicated the same for non-residential floodproofing projects. Of those that said they have not implemented residential acquisitions, eight parish respondents said that maintenance or tax base implications led to their parish's decisions not to participate. Also, in the survey, most respondents rated the effectiveness of voluntary acquisitions as much lower than that of residential elevations (Appendix A, 2.1).

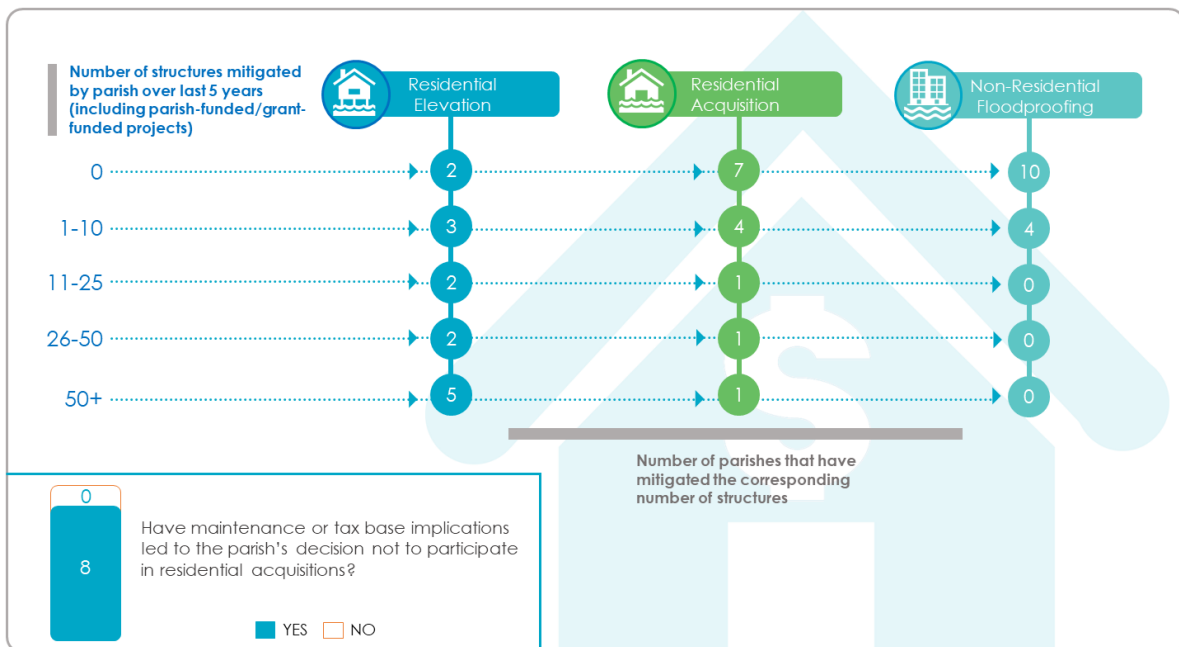


Figure 15: Number of Structures Mitigated by the Parish over the Last Five Years

Respondents reported capacity for elevation project implementation as much higher than for acquisitions or floodproofing projects. With existing contract capacity, eight out of 15 respondents indicated that their parish could implement more than 50 residential elevation structures at a time, and only three said that their parish could not implement any (Figure 16). By contrast, six out of 15 respondents indicated that their parish could implement more than 50 residential acquisitions with existing contract capacity, with seven respondents saying the parish could not implement any. Floodproofing projects fell somewhere in the middle. With existing parish in-house staff alone, the trend across the three project types followed a similar pattern but with lower numbers of projects implemented. The majority of respondents indicated that their parish could not implement any nonstructural project types using existing partnerships and memorandums of understanding (MOUs). They indicated that partnerships and MOUs assist more with implementation of other project types, such as drainage projects, pump stations, or coastal restoration projects.

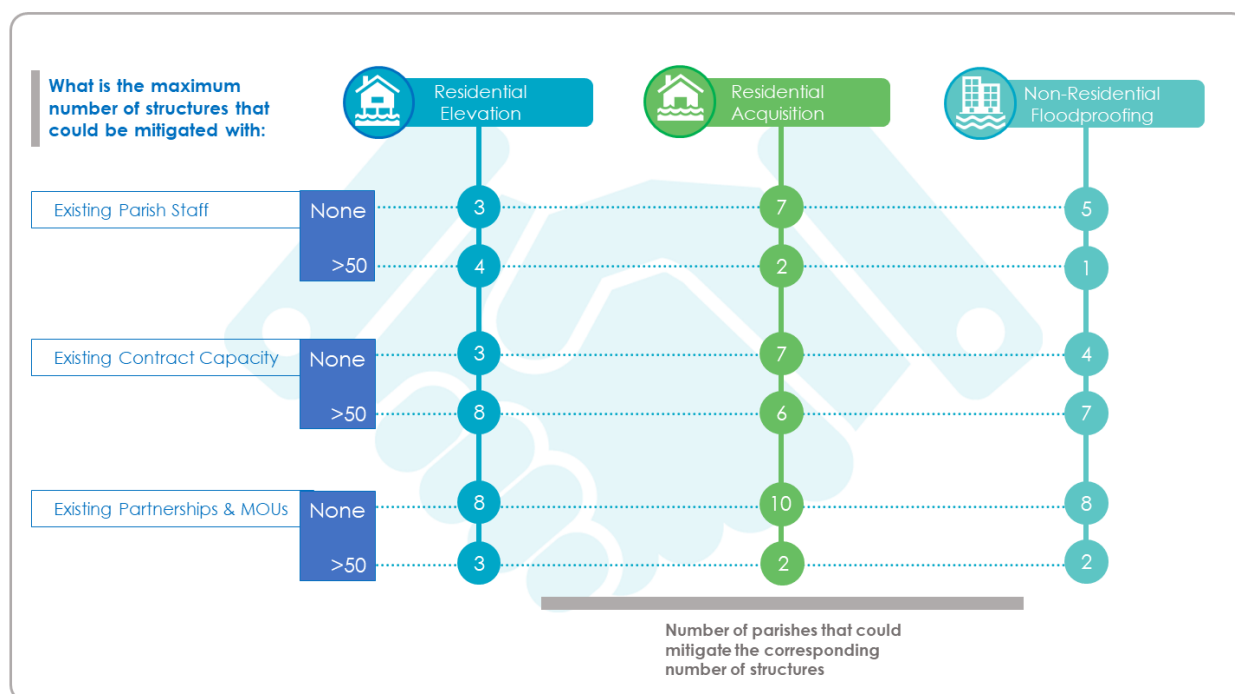


Figure 16: Maximum Number of Structures that could be Mitigated by Parish

Participants indicated a need for increased alignment between existing program eligibility requirements and local needs. Participants listed a variety of project types that existing programs do not fund or underfund. In other cases, individual households and property owners may not qualify for certain programs.

Numerous participants specifically referenced that FEMA programs prioritize repetitive and severe repetitive loss (RL/SRL) properties and low to moderate income (LMI) households in funding nonstructural mitigation projects – these are limited categories that leave out a large and under-eligible “missing middle.” In some reported instances, households had been newly mapped into the floodplain or mapped in after construction but were not classified as RL/SRL or LMI and, therefore, left out of program eligibility (e.g., ICC funding through the NFIP). Other participants reported uninsured residents being at risk of flooding and/or people being priced out of their homes due to the rising cost of insurance.

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address project challenges include:

- Developing a federal program/policy advocacy plan based on local needs to consider parish-requested programmatic changes, including:
 - Increased federal funding for mitigation reconstruction, elevators for residential elevations, alternative housing during projects, etc.
 - Increased federal funding on planning and other flood risk mitigation project types including marsh creation and green infrastructure
 - Evaluating alternate implementation mechanisms for critical flood protection areas, including possible use of eminent domain in extenuating circumstances

This report also recommends that the following strategies and options be investigated for appropriateness and feasibility:

- Exploring the use of funding streams for mortgage down payment assistance outside the flood zone

2.3.4 Policy

In the interviews and workshops, participants often described a need for policy improvements within their parish. Although the specifics varied widely among parishes, a clear majority of participants cited a need for higher standards to address growing flood risk. Most parish planning documents do not address climate change-related hazards or consider projections of climate and weather (Appendix A, 2.5.5).

Further, participants noted that some permitting or legislative requirements are in need of update. Several participants noted a need for more efficient permitting processes. For example, one participant expressed a desire for the statewide implementation of a permitting process that would entail a single concurrent review of projects, rather than several or consecutive reviews. Additionally, the participant noted that some activities could be exempt from state permits, such as elevation of a structure at the same site, potentially saving a lot of time and effort, and that certain restoration project types can have proscriptive activities prescreened and preapproved for a faster and more accessible process for private citizens and government agencies.

"Elevating is too expensive for builders and developers; slab houses are a problem."

"Lack of higher standards disproportionately affects the poor."

There was widespread interest in support from the State for guidance and commitment to higher standards as well as the provision of incentives to encourage flood risk reduction by private property owners and/or developers.

Most survey respondents (12 out of 13) indicated that their parish has local flood damage prevention ordinances in place (Figure 17). Ten out of 13 respondents said their parish currently evaluates the potential impacts of new development or capital improvement projects on the floodplain. Nine out of 13 respondents indicated that their parish's ordinances provide restrictions on development in the floodplain. Nonetheless, a smaller number of respondents indicated the existence of higher standards, such as freeboard, in their parish's current ordinances, or the implementation of higher standards in their parish (Figure 18). One respondent out of 13 said that their parish has implemented building two-feet above the FEMA base flood elevation (1 percent annual chance flood elevation) for most projects.

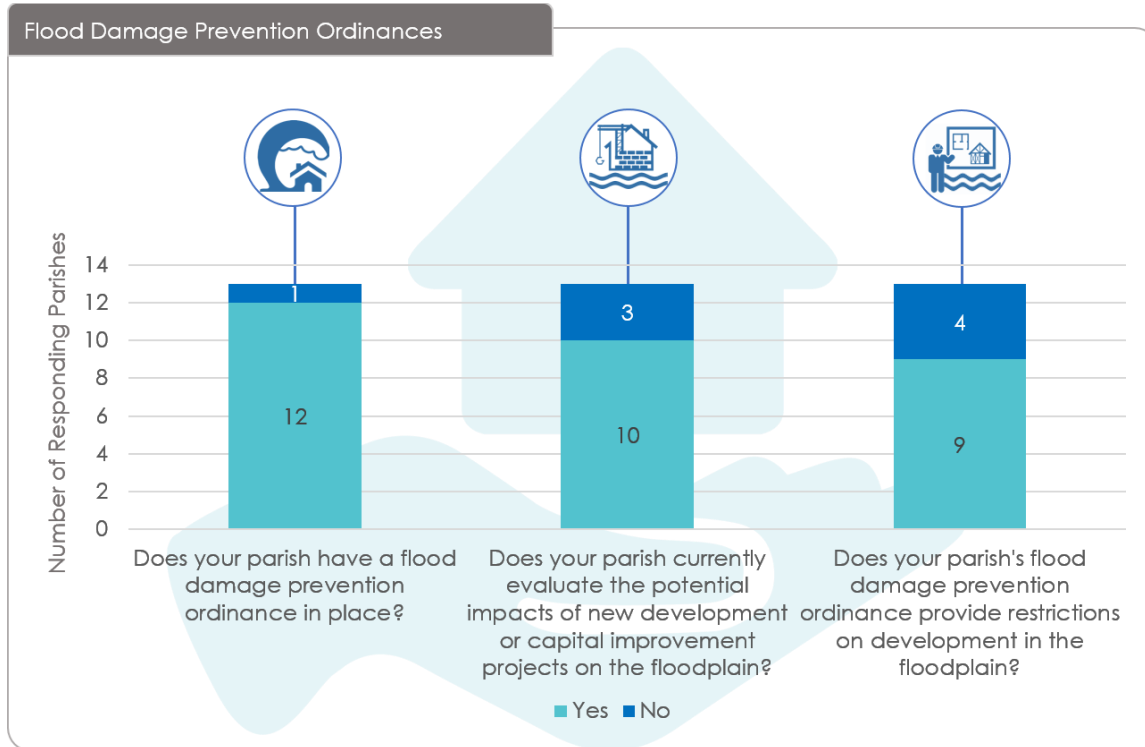


Figure 17: Parish Flood Damage Prevention Ordinances

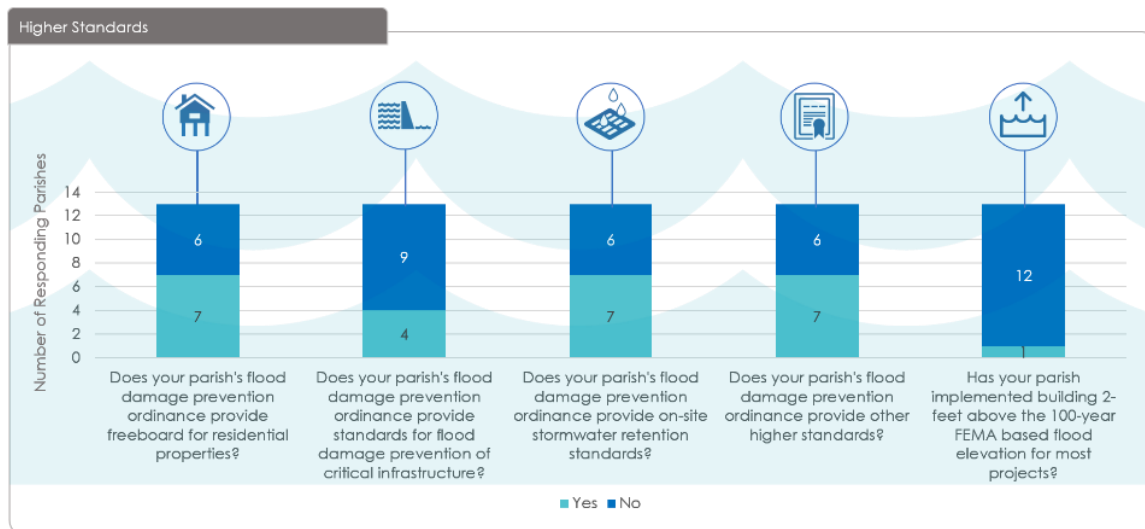


Figure 18: Existence and Implementation of Higher Standards

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address policy challenges include:

- Developing a federal program/policy advocacy plan based on local needs to consider possible changes to the Code of Federal Regulations related to the NFIP and other federal grant programs, as well as project maintenance standards
- Facilitating alignment of parish policies and actions toward state, regional, and local flood risk reduction objectives
- Producing and publishing policy value propositions and development guidance

This report also recommends that the following strategies and options be investigated for appropriateness and feasibility:

- Implementing state actions that can increase CRS credits statewide
- Developing, implementing, and enforcing state-level floodplain management policies
- Incentivizing the private market to make flood resilient decisions

2.3.5 Education

Participants cited a need for consensus around flood risk, clarity on the economic impact of higher standards, and a need for the market to recognize increasing flood risk. Many participants expressed that the costs of inaction and the benefits of strong policy must be made clearer to both the public and elected officials. Further, participants noted other occurrences of misalignment with public perception, including public mistrust of government, complacency and a false sense of security for properties located behind levees, and fear and a sense of powerlessness to those who are facing repeated flooding from heavy rain events. To address these issues, participants expressed strong interest in flood risk communication-related news media engagement, commercials on local TV stations, the use of social media (particularly Facebook), and YouTube videos focused on local context.

In the survey, although most respondents (14 out of 15) said that their parish currently engages in active education and outreach to make people aware of *current* flood risk (as defined by FEMA FIRMs), three out of 15 respondents said their parish engages in such activities to raise awareness about expected *future* flood risk (as defined by the Louisiana Coastal Master Plan) (Figure 19).

Participants identified education and outreach as significantly underfunded and underappreciated across the state. Participants clarified that increased communication and outreach could have the dual benefit of building trust and awareness toward both risk and methods to reduce risk, potentially empowering individuals and facilitating action at the local level.

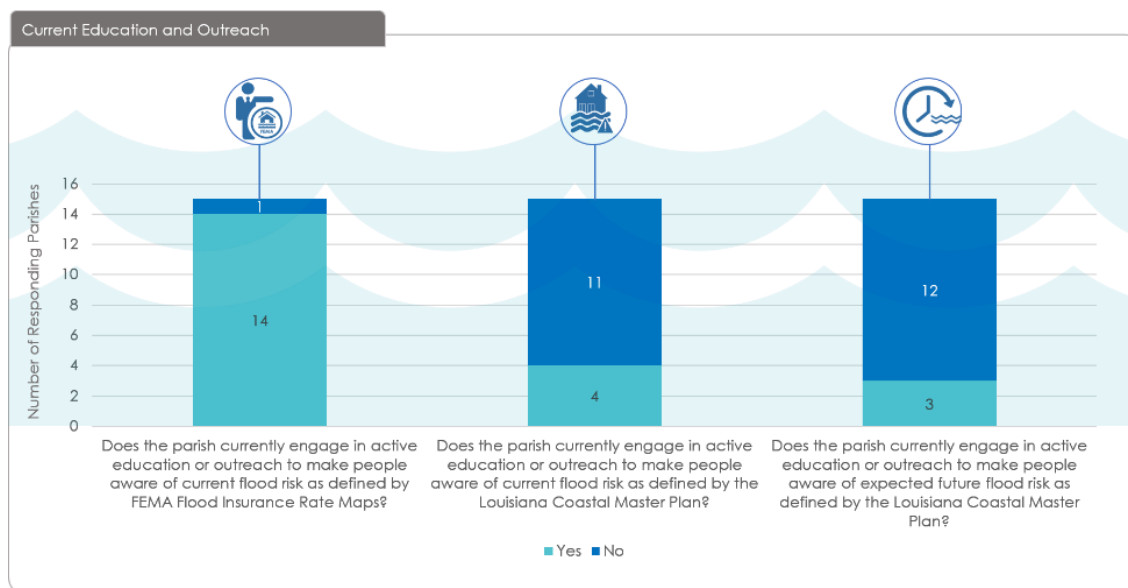


Figure 19: Current Education and Outreach

Respondents indicated that social media and public meetings and workshops are effective outreach and education tools, whether the goal is to increase awareness about future flood risk or support for flood risk mitigation projects and policies (Figure 20). Respondents indicated that building awareness and support for flood risk mitigation-related policies is more complex than doing the same for specific projects or for current and future flood risk more generally. Interestingly, enthusiasm for regularly scheduled, as opposed to intermittently scheduled, participatory engagement – specifically public meetings, workshops, or neighborhood and civic group meetings – increased significantly when considered as a tactic of building awareness and support for policies (Appendix A, 2.4.5).

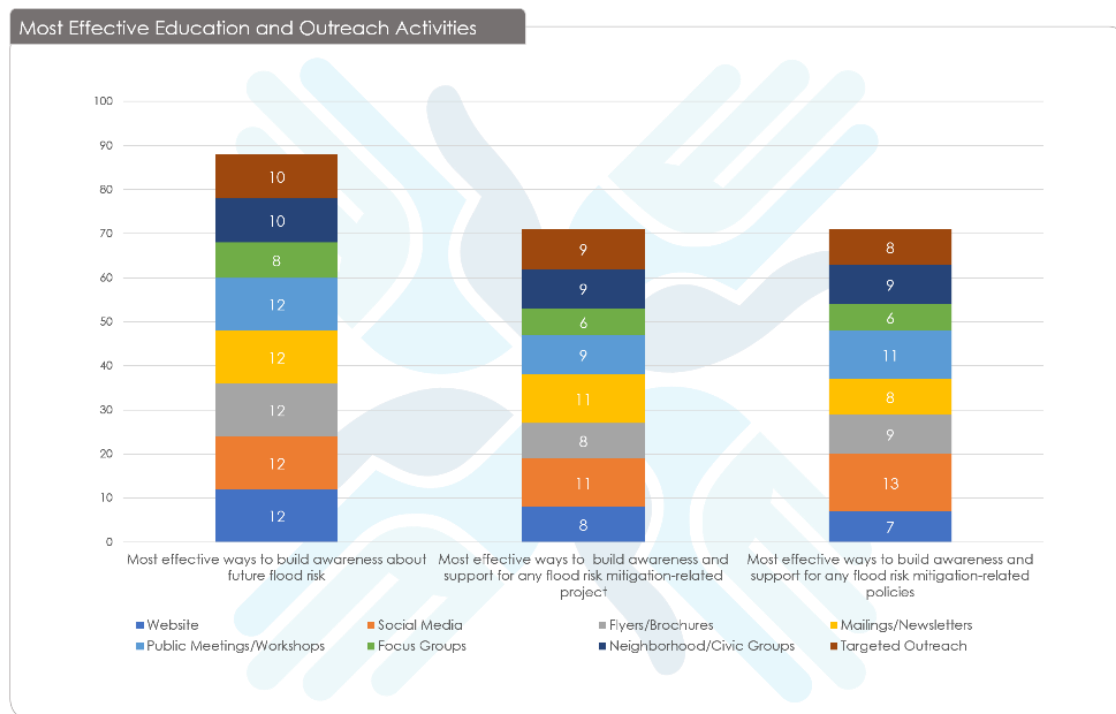


Figure 20: Most Effective Education and Outreach Activities

Many participants also expressed a strong need for targeted engagement and education of key sectors, including builders, developers, realtors, property appraisers, and the insurance industry. This could have multiple benefits, such as promoting the use of higher standards, encouraging integration of flood risk into market valuations, and ensuring effective transmission of crucial flood risk information at various scales. For example, one participant emphasized the need to provide trainings to and stronger partnerships with flood insurance personnel on the importance of understanding and educating their clients about the benefits of mitigation actions, such as Increased Cost of Compliance funding, and other options at their disposal, such as the little-known Ordinance or Law Coverage in their homeowner's insurance policy, which would help pay for code upgrades following substantial damage. This can have cascading effects by dispersing educated messengers of crucial information about flood risk mitigation. It may also relieve parish officials who are "wearing too many hats" of taking on the responsibility of advising insurance policy holders of their rights.

Overall, feedback indicated a need, across topic areas, for outreach and education support, particularly from other parishes and regional organizations (Appendix A, 2.6). Participants also indicated willingness to provide outreach and education support to other parishes, regional organizations, and municipalities.

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address education challenges include:

- Developing and implementing a comprehensive, coordinated, statewide outreach, education, and engagement strategy
- Developing an "Everything Flood-Related" website for public, state, local, and other stakeholder use, including links to flood-related resources within and outside the state and resources for citizens, jurisdictions, and stakeholders
- Producing and publishing "handbooks" for general homeowners and the public with consistent and accessible language around flood risk

2.3.6 Coordination

Participants indicated that increased coordination on various levels would contribute to increased capacity and capability to implement flood risk reduction related projects, programs, and policies. Examples include increased or formalized communication and knowledge sharing between parish departments, cross-jurisdictional coordination within the parish, regional cross-coordination, coordination across state agencies or between the State and local jurisdictions, and resolution of trans-boundary issues with other states. The most consistently mentioned and highly prioritized of these were regional coordination and coordination across state agencies or between the State and local jurisdictions.

Regarding state coordination, participants recommended state adherence to local ordinances when developing or implementing projects and actively maintaining state waterways. Regarding regional coordination, many participants referenced a need for drainage coordination to avoid adverse downstream impacts. Specifically, participants cited the importance of funding, political will, and incentives or penalties in order to achieve stronger coordination, noting that, in many cases, the venues and talent needed for coordination already exist but require more resources or tools. Others indicated that increased CRS User Groups and regional land use and infrastructure planning could benefit capacity and

capability. Significantly, participants expressed that any regional approach should allow regions to be more coordinated to facilitate effective, efficient, and direct access to decision-makers.

"Lack of regional coordination has led to runoff and backwater flooding in our parish."

"Drainage systems across parishes aren't working together."

In the survey, most respondents indicated that their parish does not coordinate closely with other parishes on flood risk reduction and related planning and policy, nor do they participate in regional planning coordination for similar purposes (Figure 21). There were exceptions to this, including possible best practices that can be explored within specific parishes, such as processes parishes or municipalities have undertaken to engage in dialogues with other parishes or municipalities.

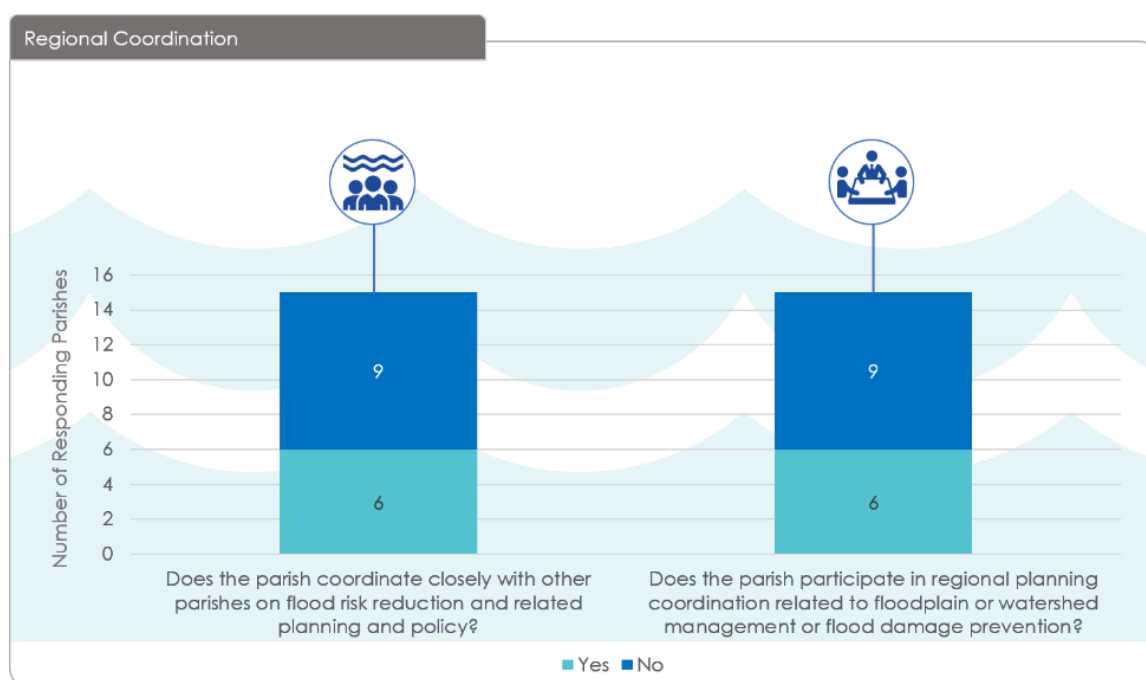


Figure 21: Regional Coordination

Overall, the majority of survey respondents said that current external coordination only partially meets their parish's needs, and a few indicated that their needs are not being met at all (Figure 22). These findings indicate that, while there is already some ongoing coordination, there is a desire for increased coordination across parishes related to floodplain management and watershed planning.

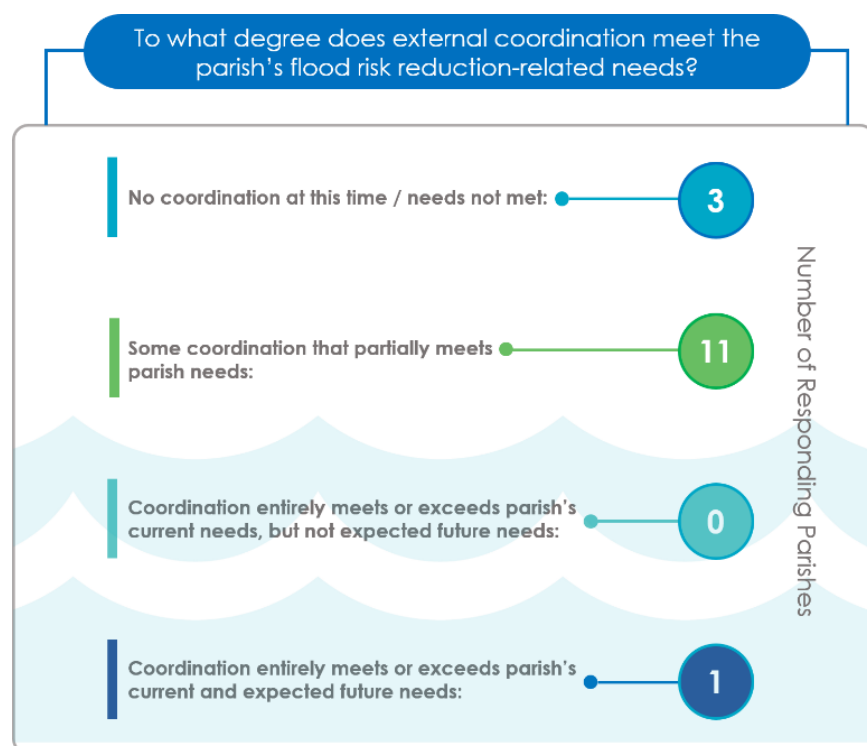


Figure 22: Parish External Coordination Needs

Across planning and programmatic areas within parishes, respondents indicated that parish staff with the strongest track record of coordination with other programmatic areas are those working in building permitting and those working in the review of local development plans for compliance with flood damage prevention policy (Appendix A, 2.2.6). Participants reported that parish staff most isolated from other programmatic areas are those working in capital improvement planning and natural resource and/or open space management. Somewhat aligned with this finding, respondents indicated that cross-coordination was of the lowest priority for staff working in natural resource and/or open space management and the NFIP CRS, and highest for staff in building permitting, building code enforcement, and local flood damage prevention policy (Appendix A, 2.2.5).

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address coordination challenges include:

- Supporting integration and coordination of local hazard mitigation plans, comprehensive plans, capital improvement plans, and others to better align these plans with flood risk reduction goals
- Facilitating watershed-level coordination

This report also recommends that the following strategies and options be investigated for appropriateness and feasibility:

- Exploring the benefits of facilitating cross-training at the local level to reduce risk of operational disruption
- Developing, implementing, and enforcing state-level floodplain management policies, including adhering to uniform standards in developing watershed plans

2.3.7 Data

While the majority of survey respondents indicated that their parish does have a GIS department in place with an average of four staff members (Appendix A, 2.7), almost every respondent indicated that their parish has some gaps in available data or data gathering and maintenance needs. Significantly, most parishes indicated major gaps in the collection and maintenance of hydrologic data. Figure 23 displays a selection of survey results on the issue of hydrologic data. In the interviews and workshops, participants also commonly indicated a need for rain and stream gauges. There was also a strong appetite, across participants, for watershed-based data and modeling. Further, several participants cited a need for more comprehensive data on the built environment, such as a database containing first floor and ground elevations for every structure in the state, which they argued would save substantial money and effort by reducing the need to obtain individual elevation certificates or data as-needed.

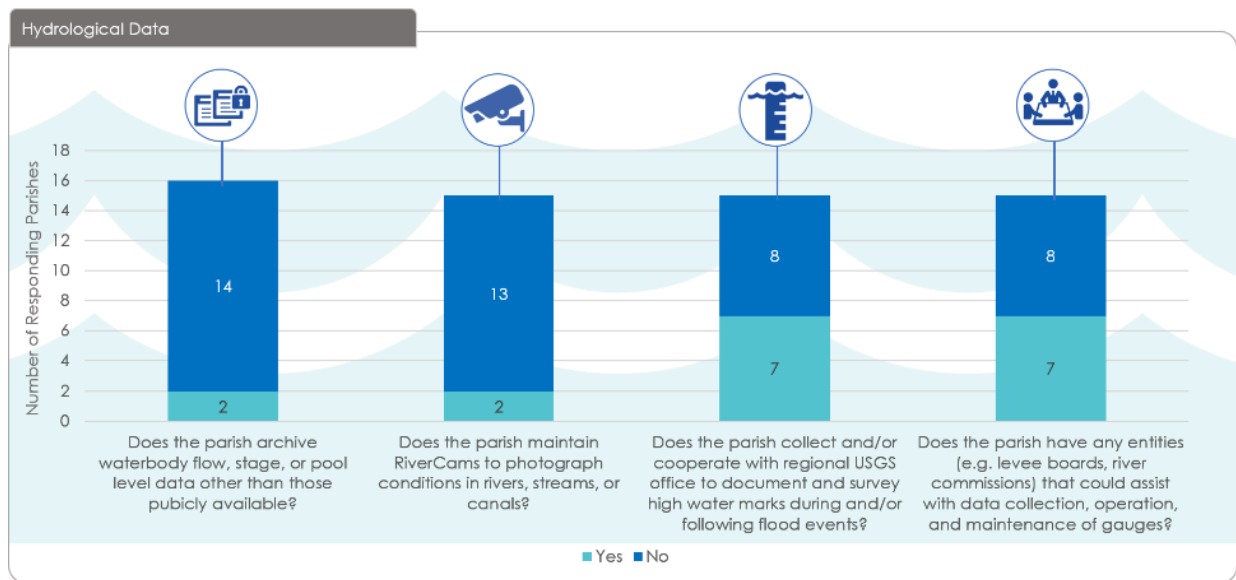


Figure 23: Hydrologic Data

Inaccessibility of existing data was also a common theme. Participants indicated that a uniform mechanism or tracking system for logging, accessing, and sharing data could support effective project implementation. In the survey, respondents almost unanimously expressed interest in some sort of data portal or data library to compile and make accessible the best-available data (Appendix A, 2.2.7).

Further, most participants reported their parish having or having had problems with their FEMA FIRMs, citing such issues as inaccurate maps as well as insufficient available data for their FIRMs (Figure 24). Participants also frequently raised this issue during the interviews. Nevertheless, survey respondents indicated that they are proficient with FIRMs and have the information they need to effectively interpret them.

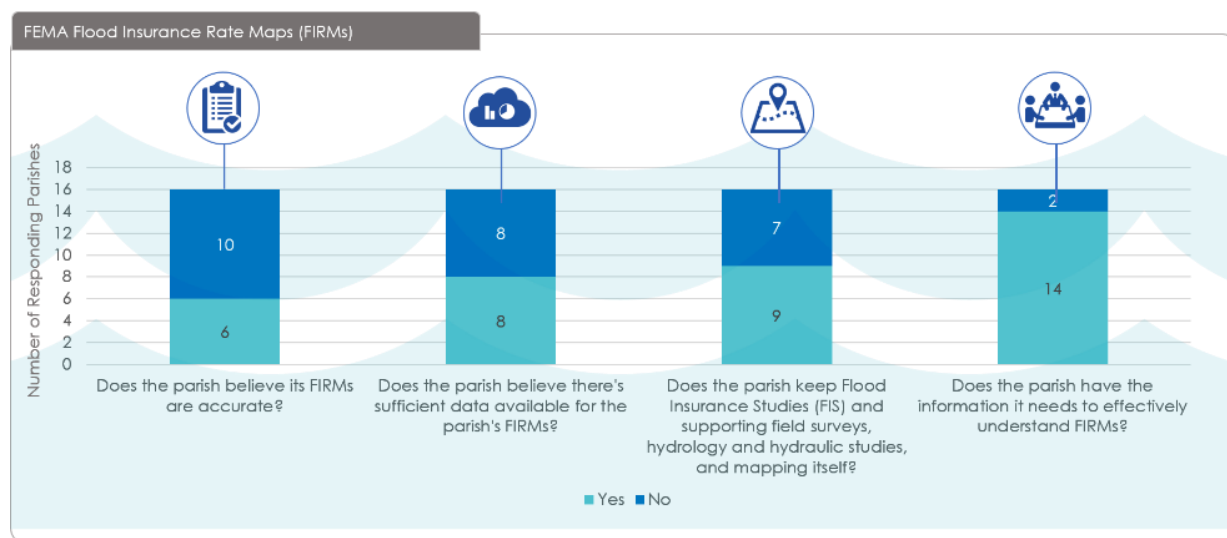


Figure 24: FEMA FIRMs

A detailed table, containing information on a variety of specific data types across parishes, can be found in Appendix A, 2.7.

Some strategies and options currently being investigated or developed through the Louisiana Watershed Initiative to help address data challenges include:

- Developing an "Everything Flood-Related" website for public, state, local, and other stakeholder use, including links to data needed to understand flood risk and evaluate projects
- Pursuing streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions
- Pursuing data-driven regional planning, including housing regional data for all areas within a watershed

3.0 Recommendations

The findings that emerged from the assessment allowed the team to identify four overarching goals divided into 12 objectives, as well as 19 specific strategies to achieve those goals and objectives. Participants also helped identify a variety of potential approaches that could be used to implement the strategies.

3.1 The Role of the State

The recommendations in this report emerged from the assessment results and characterize the State's possible role in advancing resilient communities through nonstructural projects and related planning and policy. Many parish staff are experts in their field and community and highly capable and passionate about the work they do. Foundational to the goals and strategies recommended in this report is recognition of the skills and knowledge that local government staff have and the importance of working with them to develop state programs. Strong coordination is needed, and the State can both lead and play a connecting role. The four goals guiding this report, each respectively composed of several objectives, are as follows:

1. Improve access to nonstructural mitigation projects
2. Improve the State's leadership role in flood risk reduction
3. Foster coordination, collaboration, and communication
4. Serve as a hub for actionable resources and data

In this context, the State is understood to be a collaboration between CPRA, the other members of the Council on Watershed Management, and potentially other state agencies (such as the Louisiana Department of Natural Resources (LDNR) and the Louisiana Department of Environmental Quality (LDEQ)). Rather than being seen only as an intermediary between the federal government, local governments, and other key stakeholders (Figure 25), the State can contribute meaningfully in ongoing and complex interactions with parish governments, elected officials, citizens and property owners, universities, non-governmental organization (NGOs), the finance and insurance sectors, appraisers, developers, and other stakeholders. Participants seemed to request that the State act as a facilitator and central hub (Figure 26), bridging and linking various key stakeholders in statewide flood risk management and also serving as a thought-leader, standard-setter, and contributor of needed technical and financial resources.

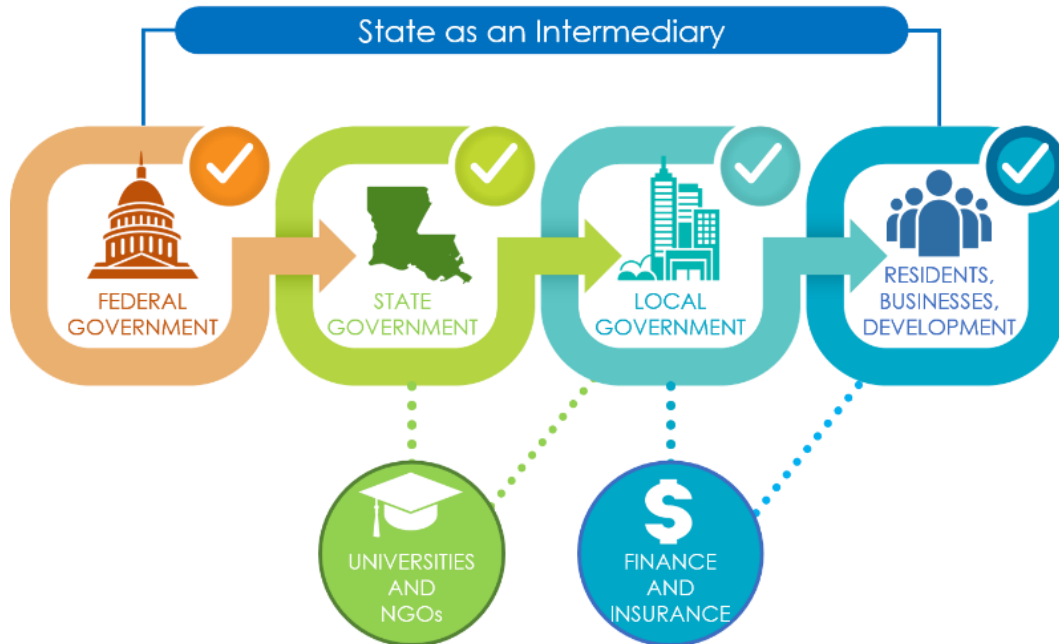


Figure 25: The State as an Intermediary

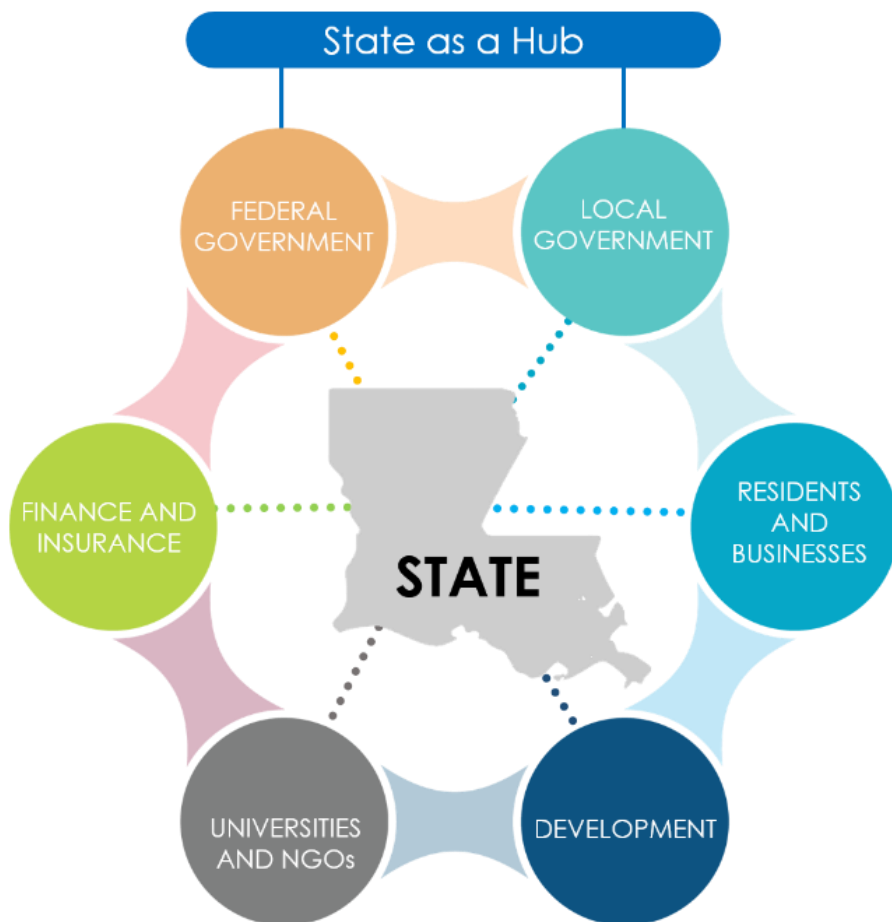


Figure 26: The State as a Hub

Another way to conceptualize the State's position is through four essential roles that the State plays in helping parishes make the most of their capabilities and capacities in flood risk reduction (Figure 27). Recommendations can be classified into these four roles, which are Assist, Lead, Bridge, and Discover:

1. ASSIST – Provide technical assistance and access to funding
2. LEAD – Set standards, advocate, and incentivize
3. BRIDGE – Build relationships with and between stakeholders to share knowledge and information
4. DISCOVER – Lead in science, technology, thought-leadership, and problem-solving

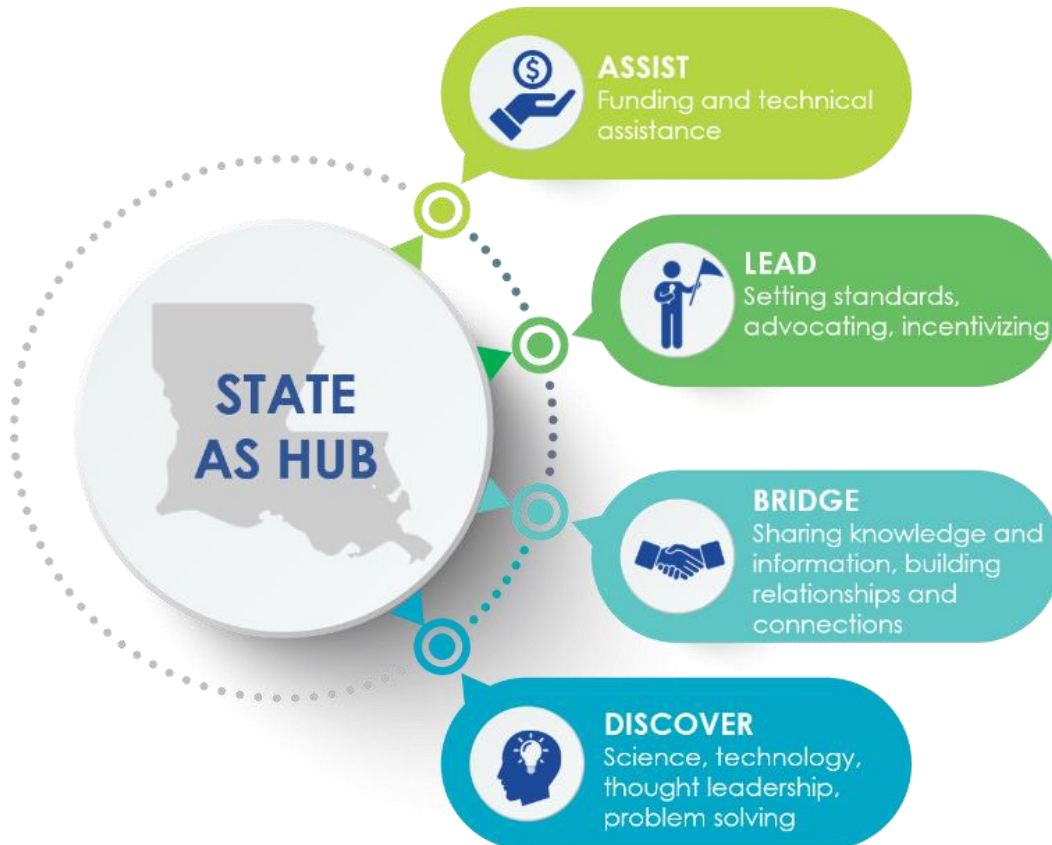


Figure 27: The Four Roles of the State in Flood Risk Reduction

3.2 Goals and Objectives to Increase Parish Capacity and Capability

Our interactions with the parish participants through the survey, interviews, and workshops informed objectives within each goal (Figure 28) and specific actionable strategies to accomplish each objective. The strategies are organized as short-term and long-term catalysts, depending on how quickly they can be implemented, and each has also been categorized as an assist, lead, bridge, and/or discover action. The full list of strategies, with example approaches that were suggested by and discussed with participants, can be found in Table 1 in this report.



Figure 28: Goals and Objectives to Increase Parish Capacity and Capability

3.2.1 Goal 1.0 Improve Access to Nonstructural Mitigation Projects

Goal 1.0 is to improve access to nonstructural mitigation projects and consists of four objectives, described below (Figure 29).



Figure 29: Goal 1.0: Improve Access to Nonstructural Mitigation Projects

Objective 1.1 Provide direct support for staffing and funding at local, watershed, and state levels to increase local capacity and capability

One of the key challenges discussed with participants during the workshop series, and the issue identified as the highest priority across all workshops, was that parishes have too few staff with too many responsibilities. This finding was echoed in the survey and interview phases of the assessment process. Supplementing this, in some cases, was an emphasis on participants' desire to improve staff knowledge, expertise, and other skills, which suggests a need for both direct support and training of in-house staff.

Budget constraints were reported as a cause of both staff capacity and staff capability gaps in multiple parishes. This seems to be tied to other issues, such as a lack of public support for raising additional revenue; some participants expressed the root cause may be that the need for funding flood risk management-related staff is not always clear (addressed through multiple objectives described below). Although multiple actions could help alleviate pressure on existing staff (e.g., streamlining program/project eligibility requirements and application processes and increased outreach and education to increase understanding of flood risk and flood risk reduction policies and programs), direct funding for staff support and direct staff support could address the need most quickly.

Example strategies to meet this objective include:

- Support local staff capacity through regional/watershed-level staff support
- Pilot a university apprenticeship program to specifically support parishes and municipalities in their flood risk reduction-related activities (projects and programs)
- Provide state-facilitated training and outreach to local staff
- Pilot a state or regional suite of experts, forming a "temp agency" for local staff support
- Establish a dedicated, non-competitive, multi-year (~ five) or annual, proactive (state or federal) funding stream for flood risk reduction activities

Objective 1.2 Align nonstructural mitigation project eligibility requirements with local needs

Many participants communicated that project types eligible for funding under existing state and federal programs are not always in accord with their parishes' existing priorities or needs, and that close engagement with locals during program development could help address this concern. To this end, both CPRA's Flood Risk and Resilience Program and the Louisiana Watershed Initiative are seeking extensive local feedback in their development processes.

Participants expressed that top-down programmatic decision-making can result in program eligibility requirements failing to meet local needs and that there can be a disconnect in understanding on the state and federal levels regarding a community's specific conditions. Participants asked that the State serve as an advocate for parishes and local communities in program development at the federal level – viewing them as partners in the pursuit of long-term statewide resilience.

Example strategies to meet this objective include:

- Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy
- Develop a federal program/policy advocacy plan based on local needs

Objective 1.3 Accelerate project funding and implementation to meet local needs

Participants expressed frustration that funding time horizons for existing programs generally do not meet local needs, owing, in large part, to time-consuming application processes, a need for consistent and streamlined procedures, and hurdles that can come from staff turnover or inconsistent application of program policy at the state or federal level. More generally, participants reported that there are not sufficient programs in place to provide rapid, direct funding for projects as they are needed. For example, the survey indicated that, among respondents, there is an average of \$173 million per parish in unfunded residential elevation projects (the nonstructural project type most highly prioritized by most parishes).

Parishes expressed that:

- Projects get stalled while applications are passed back-and-forth between agencies
- Policies and requirements are not defined and regularly updated
- State and federal agency staff turnover leads to delays
- Reporting and reviewing processes are often unclear
- Excessive paperwork leaves projects in limbo
- Project approvals are lengthy and lead to drop-outs
- Project costs increase over the course of applying, making them more unaffordable (especially for homeowners)
- Investments get stuck in permitting stages
- State Applicant Liaisons (SALs) and disaster recovery specialists assigned to different regions may not have uniform expectations, making it difficult for consultants to manage the process and timeline for amendments and applications for Hazard Mitigation Assistance (HMA) grants
- Money is often simply unavailable during rebuilding, renovations (e.g., substantial improvements (SI)), and recovery

Most of the flood risk reduction related funding that is available tends to be reactive to disasters, rather than mitigating future risk and facilitating long-term resilience. Many participants echoed that the introduction of a regular, reliable, and proactive funding source, with streamlined procedures and accessible guidance and information, could have a tremendous impact on building capacity for effective flood risk management. The State is in a unique position to be able to help speed funding and implementation as an advocate in key programmatic areas, as a hub for standardized procedures, as a provider of timely and reliable funding, and as a support system with technical expertise on a variety of grant programs.

Example strategies to meet this objective include:

- Accelerate funding processes for all types of flood mitigation projects
- Unify state grant program application and implementation processes wherever possible
- Develop a federal program/policy advocacy plan based on local needs
- Establish a dedicated, non-competitive multi-year (~five) or annual, proactive (state or federal) funding stream for flood risk reduction activities

Objective 1.4 Make nonstructural mitigation projects more affordable

Another high-priority challenge is the unaffordability of nonstructural mitigation projects for property owners – specifically local match. Some causes identified by participants included speculation that project costs are artificially inflated by the market, that the need and benefits of nonstructural projects are sometimes unclear to the general public, and that funds are simply not available or are difficult to access.

In general, participants also considered residential elevations to be higher priority than either residential acquisitions or non-residential floodproofing projects. Of the three, participants seemed least interested in pursuing voluntary acquisitions projects. Of those participants whose parishes have not implemented any acquisition projects in the last five years, 100% of them indicated this was due to maintenance or other tax base implications, citing the lack of a dedicated funding source for maintenance. As far as non-residential floodproofing projects, the majority of survey respondents did not have an identified funding source for project implementation.

The State can help fill these gaps by taking actions to help determine appropriate costs, engaging in coordinated outreach and education, and providing and advocating for dedicated funding and adequate cost-share support.

Example strategies to meet this objective include:

- Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy
- Establish a dedicated, non-competitive, multi-year (~five) or annual, proactive (state or federal) funding stream for flood risk reduction activities

3.2.2 Goal 2.0 Improve State Leadership Role in Flood Risk Reduction

Goal 2.0 is to improve the State's leadership role in flood risk reduction and consists of three objectives, described below (Figure 30).

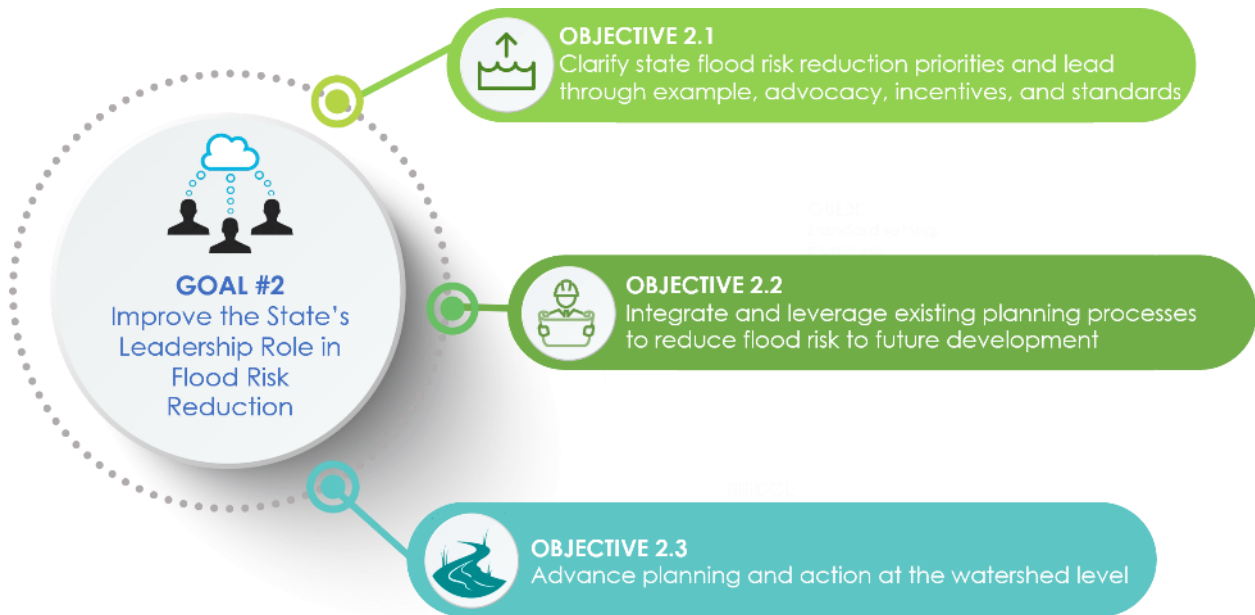


Figure 30: Goal 2.0: Improve State Leadership Role in Flood Risk Reduction

Objective 2.1 Clarify state flood risk reduction priorities and lead through example, advocacy, incentives, and standards

Many participants indicated that flood risk reduction priorities are often unclear in their jurisdictions or difficult to implement and enforce, owing in large part to political opposition to higher standards and overall needed regulatory change. Other causes identified by participants included:

- A lack of clarity on the costs of inaction and the benefits of strong flood risk reduction policy both with the public and elected officials
- A misconception of the economic impact of higher standards
- A general mistrust of government on the part of the public, owing in part to a lack of transparency and consistency in messaging
- A lack of state support in the form of commitment to existing policy and active communication on the importance of strong flood risk reduction policies and standards

By taking on a stronger leadership role, the State can help lead parishes, including their citizens, elected officials, and various sectors, toward strong flood risk resilience actions and more effective coordination through integrated policies and programs held to the highest standards and rooted in best practices.

Example strategies to meet this objective include:

- Implement state actions that can increase CRS credits statewide
- Develop a federal program/policy advocacy plan based on local needs
- Develop, implement, and enforce state-level floodplain management policies
- Incentivize the private market to make flood resilient decisions

Objective 2.2 Integrate and leverage existing planning processes to reduce flood risk to future development

Lack of coordination on various scales was a major theme for parishes in the assessment. Specifically, participants referenced a need for greater connectivity between parish departments. Greater communication and knowledge sharing could increase alignment of actions within the parish toward floodplain management goals, as well as consistent application of requirements. A majority of participants also described the benefits that increased vertical and regional cross-coordination could have toward flood risk reduction. The survey, which contained a self-assessed evaluation of integration and staff coordination across different areas, revealed that most parish plans – with the exception of FEMA-approved hazard mitigation plans – are not believed to be vertically integrated with the State Hazard Mitigation Plan, CPRA's Master Plan, or with other federal policies aimed to reduce flood risk. Coastal zone management plans are unlikely to be aligned with other plan types within the parish, and most parish plans are not integrated into regional or cross-parish planning documents. Additionally, staff working in capital improvement plan development and management, as well as natural resource and/or open space management, rarely coordinate with staff working in other planning areas. This can lead to plans within the same parish, such as comprehensive plans and hazard mitigation plans, contradicting one another. Although specifics vary from parish-to-parish, participants expressed that the State could play a role in supporting or encouraging plan integration and departmental coordination.

The State can be a leader by facilitating the integration of planning processes, leveraging these processes into other state initiatives, funding opportunities, and technical assistance.

Example strategy to meet this objective:

- Facilitate and incentivize alignment of parish policies and actions toward state, regional, and local flood risk reduction objectives

Objective 2.3 Advance planning and action at the watershed level

Nearly every participant expressed a strong desire to cooperate at the watershed-level, confirming the current path of the Louisiana Watershed Initiative. Of particular interest to a number of participants were stated needs for:

- Streamlined, watershed-based modeling
- Regional housing of data for all areas within a watershed
- State-driven regional coordination to address downstream impacts of activities across jurisdictions but within the same watershed
- State-level floodplain management policies entailing requirements to adhere to watershed-based plans
- More resources overall dedicated to watershed-based plans, policies, and studies

As the Phase I report of the Louisiana Watershed Initiative points out, the devastating 2016 floods in Louisiana demonstrated "that communities are interdependent in ways that cross jurisdictional boundaries," and that Louisiana has the opportunity "to reduce risk to life and property from flooding in a way that is also compatible with the natural and beneficial functions of [its] floodplains and watersheds" (OCD et al., 2018: I-4). Development and activities in any given part of a watershed can have direct impacts on any other part by changing the nature of the floodplain (ibid), something which participants acutely recognize. The State should be confident

in pursuing ongoing and future actions outlined in the Louisiana Watershed Initiative, aiming to leverage all actions geared toward supporting parishes in building their capacities and capabilities for increased momentum toward a watershed-based future in floodplain management.

Example strategies to meet this objective include:

- Support local staff capacity through regional/watershed-level staff support
- Pursue streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions
- Facilitate watershed-level coordination
- Develop, implement, and enforce state-level floodplain management policies

3.2.3 Goal 3.0 Foster Coordination, Collaboration, and Communication

Goal 3.0 is to foster coordination, collaboration, and communication and consists of two objectives, described below (Figure 31).

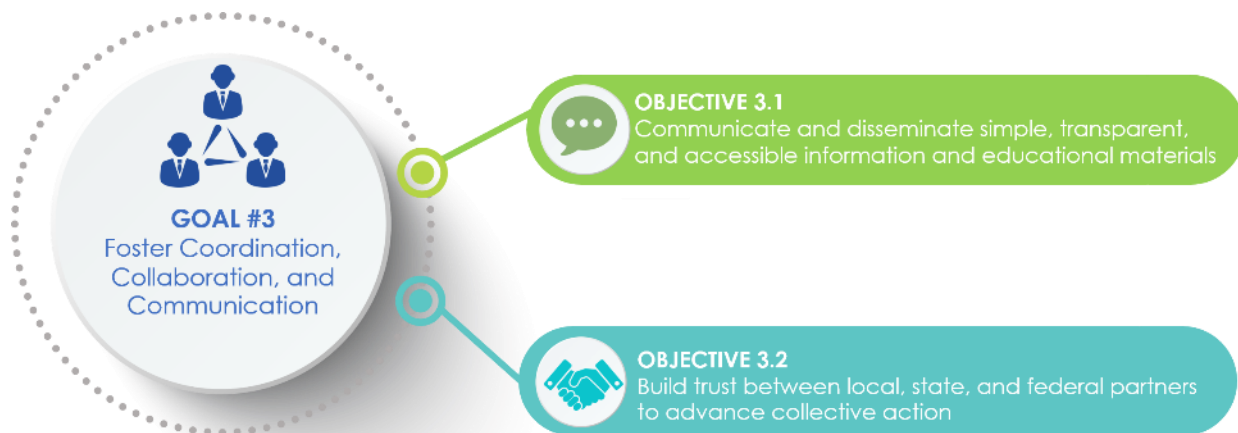


Figure 31: Goal 3.0: Foster Coordination, Collaboration, and Communication

Objective 3.1 Communicate and disseminate simple, transparent, and accessible information and educational materials

Participants expressed a need for consensus around flood risk to support stronger policy and project implementation. Participants expressed that the consequences of inaction must be made clearer to elected officials, the public, and key sectors integral to flood risk reduction activities. State flood maps, FEMA Flood Insurance Rate Maps, and other flood risk communication resources should be in alignment in order to avoid confusion about flood risk. Further, misconceptions surrounding the economic value of higher standards and flood risk reduction activities mean that the market does not always recognize risk (e.g., undervaluing pier or piling foundation construction in flood hazard areas). For some participants, this has resulted in a lack of political will to enforce certain policies in their parish. Residents and property owners may feel complacent or have a false sense of security behind levees or, otherwise, may simply

not be aware of what individual mitigation options are available to them, nor the need to pursue such options.

Participants identified a need for clear, consistent messaging about flood risk, and materials and resources simple to digest and accessible to many audiences. The State can help by communicating and disseminating simple, transparent, and accessible information and educational materials, working directly with parishes to target the appropriate audiences.

Example strategies to meet this objective include:

- Support local staff capacity through regional/watershed-level staff support
- Publish materials that support capability building around flood resilience

Objective 3.2 Build trust between local, state, and federal partners to advance collective action

At the end of the process, participants were generally enthusiastic about the assessment interviews and workshops, expressing appreciation for the State's efforts to create a space for safe and open dialogue through which to learn directly from parishes. Multiple participants expressed that this type of engagement should be more regular and tied to tangible outcomes. Inclusive dialogue, cross-training, and efforts for joint learning and knowledge production can be powerful tools to build and strengthen trust between parish governments and the State and, by extension, between the public and the government more generally.

In its role as a hub managing the coordination between various stakeholders and levels of governance, the State should ensure it is taking deliberate actions to encourage collaboration and engagement between a diverse array of stakeholders. It is also in a position to play the role of advocate for parishes at the federal level. Across these various entities, stakeholders will have differing sets of values, objectives, and understandings. Trust between diverse stakeholders, which emerges from the collaborative, and sometimes conflictual, processes of trying to achieve common understanding, is critical to inclusive and adaptive long-term decision-making. The process of dialogue itself is a powerful trust-building exercise, and the breakdown of dialogue can leave stakeholders mistrustful of even the best available data (Cravens and Ardoin, 2016). Building trust between partners on different scales can also realize a wealth of co-benefits, strengthening integration between plans, policies, and programs across the state. It can also drive commitment to flood risk reduction as a collaborative effort and enable greater adaptability to change and uncertainty.

The State can directly facilitate these processes of trust-building across stakeholder groups by encouraging dialogue, creating connections, and being consciously inclusive, transparent, and collaborative in its decision-making. Crucially, the State should ensure that any decisions made and any tools or information produced are credible, salient, and legitimate in the eyes of as many stakeholders as possible, accounting for the co-existence of differing values and needs (Cash et al., 2003).

Example strategies to meet this objective include:

- Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy
- Facilitate cross-training to build capacity
- Develop a federal program/policy advocacy plan based on local needs

3.2.4 Goal 4.0 Serve as a Hub for Actionable Resources and Data

Goal 4.0 is to serve as a hub for actionable resources and data and consists of three objectives, described below (Figure 32).



Figure 32: Goal 4.0: Serve as a Hub for Actionable Resources and Data

Objective 4.1 Provide consistent and reliable tools and procedures

There was a clear call from participants during the assessment for a greater consistency and reliability of tools and procedures that parish staff rely on to complete their day-to-day jobs. Participants indicated that streamlined program processes, unified application systems, and templates for forms and RFPs would support program and project implementation, particularly for staff working in grant management. Further, many participants indicated that standardized operating procedures and quality control procedures for data collection and evaluation, including models, would increase capacity to address flood risk by ensuring the quality of information used in decision-making. Consistent access to high-quality, reliable data and streamlined models would help parishes to pursue important flood risk reduction projects, as well as increase consensus on flood risk in many parishes. This consensus would help engage elected officials and the public around flood risk reduction projects and policies.

The State can utilize actions already underway through the Louisiana Watershed Initiative, as well as spearhead new and innovative approaches, to provide parishes with the consistency they need for grant, project, and data management.

Example strategies to meet this objective include:

- Develop an “Everything Flood-Related” website for public, state, local, and other stakeholder use
- Unify the state grant program application and implementation processes, wherever possible
- Publish materials that support capability building around flood resilience

Objective 4.2 Fill data gaps and ensure access to best available data

Participants expressed a strong desire for data to be collected, maintained, and housed for reliable and accessible use. Specifically, many participants expressed interest in some sort of statewide data, resource, and link repository based on watershed boundaries. Other participants cited various data gaps that the State could help fill, including rain gauges and stormwater data, stream gauges, and data on the built environment. The majority of responding parishes indicated that they did not house information, including streamflow data, temperature data, data on environmentally sensitive areas, impervious surface inventories, and other types of information (Appendix A, 2.7). The State can continue engaging with parishes directly to get a deeper sense of their specific data needs and how it can best assist in filling these gaps.

A guiding principle of the Louisiana Watershed Initiative is that the root of all wise decision-making “is accurate, complete, transparent, and accessible data and information” (OCD et al., 2018: I-14). In line with this, participant feedback from the assessment confirms that ongoing actions being undertaken by members of the Council on Watershed Management are moving in a direction that is relevant to parishes. As will be detailed further in Chapter 4.0, the “Everything Flood-Related” website presently under development has high potential to serve as a centralized clearinghouse and hub for best available existing data, volunteered geographic information from parishes and their constituents, and new models and data generated by the State.

Example strategies to meet this objective include:

- Develop an “Everything Flood-Related” website for public, state, local, and other stakeholder use
- Pursue streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions

Objective 4.3 Gather information needed to ensure inclusive decision-making

Participants confirmed that overly top-down decision-making on the state or federal level can often result in programmatic mismatches with local needs. In addition, processes of trust- and consensus-building are critical to implementing effective flood risk reduction solutions, because they ensure credibility and legitimacy to a wide spectrum of stakeholders. Parish staff are highly knowledgeable and skilled about what they do in their specific local contexts, and they and their constituents often utilize innovative and homegrown local risk reduction strategies not necessarily known to neighboring parishes, the State, or regions. The State can leverage this wealth of local expertise and local experience to add further detail and depth into decision-

making. This may involve efforts to identify key stakeholders – including but not limited to parish staff, local businesses, homeowners, builders, developers, and civil society organizations, particularly those representing marginalized communities – in an ongoing process of outreach, engagement, and participatory planning. The more the State engages and collaborates with locals, the more it can draw on a rich and expanding reservoir of resources and knowledge. Greater inclusivity and engagement can also have the co-benefit of encouraging communities to become more invested in taking actions to develop long-term resilience to current and future flood risk.

Example strategies to meet this objective include:

- Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy
- Facilitate cross-training to build capacity

3.3 Example Approaches to Implement Capacity and Capability Building Strategies

Table 1 details the 18 strategies to build parishes' capacities and capabilities which were developed to meet the goals and objectives outlined above. In addition to specifying, for each strategy, the specific objective it aims to address, as well as the current implementation status, the leading implementing entity, and which of the State's four essential roles the action represents, example approaches to each strategy are also included based on suggestions made by participants throughout the assessment.

Table 1: Strategies and Example Approaches

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|-------------------------|---|-----------------------|-------------------------------------|-------------------|--|
| 1.1, 2.3 | Support local staff capacity through regional/watershed-level staff support | Strategy in progress | Council | Assist / Bridge | <p>Possible responsibilities for these staff include:</p> <ul style="list-style-type: none"> • Serve as a parish/state liaison • Increase regional coordination • Provide watershed-level floodplain management support • Technical support, as needed • Coordinate trainings and engagement events |
| 1.2, 1.4, 3.1, 3.2, 4.3 | Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy | Strategy in progress | Council/CPRA (for coastal parishes) | Assist / Bridge | <p>Establish a regular forum for local to state feedback</p> <p>Ensure broad public engagement and regular feedback mechanism in state program development, including Flood Risk and Resilience Program and Louisiana Watershed Initiative</p> |
| 4.1, 4.2 | Develop an "Everything Flood-Related" website for public, state, local, and other stakeholder use | Strategy in progress | Council | Bridge / Discover | <p>Publications</p> <p>Data</p> <ul style="list-style-type: none"> • Locally-provided • State-developed • Best available • Volunteered geographic information |
| 2.3, 4.2 | Pursue streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions | Strategy in progress | Council | Bridge / Discover | <p>Implement a watershed-based flood mapping program for FEMA flood maps</p> <p>Integrate upland flood conditions in coastal modeling</p> <p>Pursue and generate the following:</p> <ul style="list-style-type: none"> • A centralized GIS system • Statewide LiDAR • Rain gauges • Stream gauges • A database for built environmental data, including first floor and ground elevations for existing structures <p>Standardize quality control procedures for data and information collection/evaluation</p> |

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|--------------|--|-----------------------|--|-----------------|--|
| 1.1 | Provide state-facilitated trainings and outreach to local staff | Strategy in progress | Multiple agencies/ Regional entities/CPRA | Assist / Bridge | Possible topics include: <ul style="list-style-type: none"> • Procurement requirements • Benefit-cost analyses (BCAs) • Implementation of FEMA, HUD, and/or other state mitigation or disaster recovery grants • Project funding applications • Long-term operations/maintenance of acquisition projects • Data management • Outreach and engagement for nonstructural projects |
| 1.3 | Accelerate funding processes for all types of flood mitigation projects | Near-term strategy | Council | Lead / Discover | Develop pre-disaster HMGP applications |
| 1.3, 4.1 | Unify state grant program application and implementation processes wherever possible | Near-term strategy | Council | Lead / Bridge | Streamline program processes Standardize project types Create a unified online application and grant management portal <ul style="list-style-type: none"> • Include a pre-application portal to speed implementation when funding is available Move the State toward a centralized funding clearing house (which could accept a base application then poll/inquire throughout the state agencies to find available funding within program constraints) Pursue online policy and project status transparency through the "Everything Flood-Related" website and data portal |
| 3.1, 4.1 | Publish materials that support capability building around flood resilience | Near-term strategy | Council | Lead | Produce and publish: <ul style="list-style-type: none"> • Policy value propositions and development guidance • Standard operating procedures (SOPs) and templates (RFPs, forms, training presentations) • A best practices "library" from other parishes and states, including processes parishes or municipalities have undertaken to engage in dialogues with other parishes or municipalities • "Handbooks" for grant managers/general homeowners/public with consistent and accessible language around flood risk Link with "Everything Flood-Related" website |

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|--------------------|---|-----------------------|---------------------|---------------|--|
| 1.2, 1.3, 2.1, 3.2 | Develop a federal program/policy advocacy plan based on local needs | Near-term strategy | Council | Lead / Bridge | <p>Parishes provided the following examples of areas of advocacy with federal entities they are looking for the State to provide. The State should continue engagement to develop a list of priorities for federal program changes, and coordinate with other states and the federal government to accomplish such changes.</p> <ul style="list-style-type: none">• Possible changes to Code of Federal Regulations related to the National Flood Insurance Program and other federal grant programs, as well as project maintenance standards• Parish-requested programmatic changes:<ul style="list-style-type: none">◦ Explore implementing a block grant model for resilience funding (for example, if a project is prioritized in the watershed plan and developed according to specific standards, it is eligible)◦ Direct federal resilience funding to population receiving areas◦ Increase federal funding for mitigation reconstruction, elevators for residential elevations, alternative housing during projects, etc.◦ Increase federal funding on planning and other flood risk mitigation project types including marsh creation and green infrastructure◦ Investigate the need to increase funding for non-residential elevations◦ Coordinate with FEMA to investigate the feasibility of providing ICC funding for match outside of substantial improvements/substantial damage (SI/SD)◦ Evaluate alternate implementation mechanisms for critical flood protection areas, including possible use of eminent domain in extenuating circumstances◦ Investigate advocating for eligibility of residential floodproofing• Engage the flood insurance commissioner and other key agencies to ensure a common understanding of local needs related to flood risk reduction and insurance• Administer regional elevation grants for rapid implementation after flooding• Consider providing funding to people who have elevated or floodproofed on their own to agreed-upon standards<ul style="list-style-type: none">◦ For example, base funding on pre-approved amounts, rather than receipts |

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|--------------|--|-----------------------------|-------------------------------------|-----------------|---|
| 2.2 | Facilitate alignment of parish policies and actions toward state, regional, and local flood risk reduction objectives | Near-term strategy | Council/CPRA (for coastal parishes) | Lead | <p>Strengthen and improve quality of local hazard mitigation plans to assist with planning for future flood risk reduction efforts</p> <ul style="list-style-type: none"> Require inclusion of land use planning element Utilize hazard mitigation plans to assist with the development of pre-disaster grant applications <p>Support integration and coordination of local hazard mitigation plans, comprehensive plans, capital improvement plans, and others to better align these plans with flood risk reduction goals</p> <ul style="list-style-type: none"> Consider using the Watershed Program's proposed Projects and Policy Technical Advisory Committees (TACs) to evaluate local plans for both spatial and policy alignment Consider funding or providing staff support for parish studies of plan integration using the DHS Plan Integration for Resilience Scorecard (or something similar) to encourage consistency of parish plans and overlaying of policy districts with hazard zones (with projections of future conditions), leveraging findings into state initiatives, funding opportunities, and technical assistance <p>Leverage emergency response and programs to enhance capacity for hazard mitigation and flood risk reduction such as Emergency Management Assistance Compacts (EMACs), National Association of Voluntary Organizations (VOAD), Emergency Management Accreditation Programs, Community Emergency Response Team (CERT)</p> |
| 2.3 | Facilitate watershed-level coordination | Near-term strategy | Council | Bridge | <p>Facilitate workshops to increase watershed-level coordination</p> <p>Focus funding on projects identified in watershed plans or developed through watershed-based coordination to prevent adverse impacts and maximize benefits at the watershed level</p> <p>Develop watershed-based floodplain management plans through extensive engagement with public and private entities and members of the general public</p> <p>Facilitate mutual aid agreements between parishes and other entities for project implementation</p> <p>Pursue data-driven regional planning</p> <ul style="list-style-type: none"> Pursue streamlined, watershed-based modeling Adhere to uniform standards in developing watershed plans House regional data for all areas within a watershed |
| 2.1 | Implement state actions that can increase CRS credits statewide | Strategy to be investigated | Council | Lead / Discover | <p>Create and disseminate flier templates parishes can customize and use</p> <p>Create a website with flood information all parishes can link to (potentially part of "Everything Flood-Related" website)</p> |
| 1.1 | Pilot a university apprenticeship program to specifically support parishes and municipalities in their flood risk reduction-related activities (projects and programs) | Strategy to be investigated | Universities | Assist / Bridge | <p>Example students include:</p> <ul style="list-style-type: none"> Policy and planning students Engineering students Students in modeling and other technical studies |

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|---------------|---|-----------------------------|---------------------------|-------------|--|
| 3.2, 4.3 | Facilitate cross-training to build capacity | Strategy to be investigated | Council | Bridge | Explore the benefits of facilitating cross-training at the local level to reduce risk of operational disruption <ul style="list-style-type: none"> Facilitate workshops (within parishes, between parishes, regionally, for example) to increase coordination |
| 1.1 | Pilot a state or regional suite of experts forming a "temp agency" for local staff support | Strategy to be investigated | Council/Regional entities | Assist | Possible skill sets offered by these personnel include: <ul style="list-style-type: none"> Engineering Modeling ArcGIS Grants funding and financing Policy development support Master Plan expertise Data gathering and maintenance expertise <ul style="list-style-type: none"> Historical flood losses Duration/depth of flooding Impervious surface inventories Canal inventories |
| 1.1, 1.3, 1.4 | Establish a dedicated, non-competitive multi-year (~5) or annual, proactive (state or federal) funding stream for flood risk reduction activities | Strategy to be investigated | Legislature | Assist | Possible uses for the funding include: <ul style="list-style-type: none"> Local flood risk reduction staffing, as needed Engagement and outreach Planning, plan integration studies Sliding scale for match support to property owners based on income, need, or other criteria Review of local policies and regulatory regimes with incentives for adoption of recommendations Cost-share reward for local governments with higher standards or for evaluating and increasing standards according to evaluation results/other incentives for higher standards Possible project funding options: <ul style="list-style-type: none"> Funding to help non-conforming properties (such as older pre-FIRM properties or older violations) elevate in order to come into compliance with the NFIP or local flood ordinances Incentivize properties to come into compliance through SI/SD Bring property violations into compliance and take enforcement action (such as liens) if the owner still refuses to come into compliance Mortgage down payment assistance outside the flood zone Low-interest loans for match or micro-loan/loan program for site specific improvements |

| Objective(s) | Strategy | Implementation Status | Implementation Lead | Action Type | Example Approaches Based on Suggestions from Participants |
|--------------|--|-----------------------------|---------------------|-----------------|--|
| 2.1, 2.3 | Develop, implement, and enforce state-level floodplain management policies | Strategy to be investigated | Council/Legislature | Lead / Bridge | <p>Examples include:</p> <ul style="list-style-type: none"> • State freeboard requirement • Statewide fill restriction • Stormwater management requirements • Regulatory mechanism to prevent cross-boundary adverse impacts • Requirement that the State, or any institutions using state funding, adhere to higher standards during property development and project implementation <p>Institute local review mechanism for state construction to ensure higher local standards are met</p> <p>Adhere to uniform standards in developing watershed plans</p> <p>Explore opportunities to share responsibility for enforcement of local floodplain management ordinances (such as SI/SD)</p> |
| 2.1 | Incentivize the private market to make flood resilient decisions | Strategy to be investigated | Council | Lead / Discover | <p>Explore a state ranking system for evaluation of developers/developments based on flood risk reduction actions</p> <p>Create a state-approved list of contractors that meet certain requirements, with an optional requirement to use this list</p> <p>Explore publishing a consultant code of conduct, and encourage locals to hire consultants that adopt it (similar to other professional society's ethics codes, such as the American Planning Association)</p> <p>Explore offering state-level tax credits or other incentives for use of higher standards in property development or structure improvements, including for smaller-scale projects</p> |

3.4 Direct Support Requested by Parishes

Participants indicated specific types of direct support they would like their parish to receive from the State to build capability and capacity toward flood risk reduction projects, programs, and policies. Direct support is the provision of tangible resources, such as staff, funding, technical expertise, outreach and engagement, contract/consultant support, or training. Findings presented in Tables 2, 3, and 4 are drawn, in large part, from responses to the online survey and represent a consolidation of the support participants requested in the survey, with examples pulled from all three parts of the assessment process. These findings may serve as a rough guide in prioritizing different types of direct support to the 24 parishes, generally. They are presented in aggregate for the purposes of this report, though there are also parish-specific needs to be addressed.

In general, the assessment pointed to a fundamental need for greater connectivity between state programs, priorities, and support and the needs, timelines, and priorities of the parishes. In line with this, participants repeatedly pointed to the need for technical support in the form of high-level expertise. Many participants prioritized a need for increased and streamlined access to technical support, in a variety of functional areas, over access to more training. For example, several participants cited a need for direct technical support, rather than training, in the development of benefit-cost analyses (BCAs), which can be complex and require a variety of expertise to complete, variably requiring modeling, GIS, engineering, economic, and other expertise.

Types of support requested for each project type or functional area are presented in descending order based on how many parishes requested them. Types of support with a frequency of request below five are not included in this table.

Table 2: Types of Direct Support Requested by Parishes for Nonstructural Project Implementation by Project Type

| Project Type | Most Frequent Types of Support Requested |
|-------------------------|--|
| Residential elevation | Funding resources |
| | Outreach and engagement support |
| | Contract/consultant support |
| | Staff hiring |
| | Technical support |
| Residential acquisition | Funding resources |
| | Outreach and engagement support |

| Project Type | Most Frequent Types of Support Requested |
|-------------------------------|--|
| Non-residential Floodproofing | Funding resources |
| | Technical support |
| | Training |

Table 3: Direct Support Requested by Parishes for Project Development and Implementation

| Project Type | Type of Support Requested | Examples Provided |
|---------------|---|---|
| Nonstructural | Grants management, project funding applications | <p>Programmatic requirements and administrative guidelines</p> <p>Financial management methods</p> <p>File and document management and sharing</p> <p>Clear and concise procurement guidelines</p> |
| | Outreach and engagement | <p>Workshops within and between parishes</p> <p>Engagement of specific interest groups, such as financial institutions, property appraisers, development community, elected officials, media</p> <p>Educational materials and templates that could be customized for local use</p> <p>Short educational videos on YouTube or that could be broadcast on local TV stations</p> |
| | Data gathering and maintenance | <p>Information on eligible properties (addresses, GIS shapefiles, etc.) allowing for local review of current status of property</p> <p>More accessibility to available data (e.g., hydrologic and hydraulic (H&H) models)</p> |

| Project Type | Type of Support Requested | Examples Provided |
|---------------------|---|--|
| Nonstructural | Project management | Long-term maintenance and operations support (residential acquisitions) More materials on construction methods Liaison support between permitting agencies Expedited permitting for specific project parameters |
| | Technical support | Standard Operating Procedures (SOPs) Technical support for BCAs, particularly prior to submittal Technical support in obtaining permits |
| Other project types | Grants management, project funding applications | Programmatic requirements and administrative guidelines Financial management methods File and document management and sharing Clear and concise procurement guidelines |
| | Project management | Project review to ensure projects do not have adverse impacts on watersheds More materials on construction methods Liaison support between permitting agencies Expedited permitting for specific project parameters |
| | Outreach and engagement | Workshops within and between parishes Engagement of specific interest groups, such as financial institutions, property appraisers, development community, elected officials, media Educational materials and templates that could be customized for local use Short educational videos on YouTube or that could be broadcast on local TV stations |
| | Data gathering and maintenance | Current structural conditions More accessibility to existing data |

| Project Type | Type of Support Requested | Examples Provided |
|---------------------|-----------------------------|---|
| Other project types | Contract/consultant support | Thoroughly vetted list of approved contractors for capacity and credit Template RFPs, agreements, and contracts for parish use Training on bid procedures |

Table 4: Direct Support Requested by Parishes for Flood Risk Reduction-Related Programs and Policies

| Functional Area | Type of Support Requested | Examples Provided |
|---|--------------------------------|---|
| Effective floodplain management | Funding resources | Funding to assist with CRS Repetitive Loss Area Analysis/Floodplain Management Plan development |
| | Technical expertise | Ongoing training and onsite assistance in floodplain management Letter of Map Revision (LOMR) assistance for homeowners |
| | Data management and collection | Flood elevations in addition to the 1% annual chance elevation (i.e., 0.2% annual chance flood elevation) Insurance cost projections Base-level engineering for unnumbered A-zones |
| Improving flood risk reduction-related programs | Funding resources | Funding for additional project options, based on needs of the parish |
| | Technical expertise | Responsive technical assistance with broad scope of work Provision of construction management expertise and training as-needed Trainings on interpreting and applying Master Plan models and mapped future flood risk Best practices on new development and drainage |

| Functional Area | Type of Support Requested | Examples Provided |
|---|--|---|
| Improving enforcement of flood risk reduction-related policies | Funding resources | A state or regionally-managed effort to attain federal grants to elevate homes or conduct acquisitions without a 25% homeowner match |
| | Technical expertise | Technical support for field enforcement Provision of engineering design expertise and training as-needed Provision of construction management expertise as-needed Best practices on enforcement |
| | Staff resources | Provision of inspectors as-needed, with appropriate training |
| Encouraging property owners/developers to implement site-specific flood risk reduction measures | Funding resources | Funding for publications/studies on the need for higher standards and the most effective incentives Match support for nonstructural project implementation |
| | Technical expertise | Toolkit of incentives at local, state, or federal level Staff with construction management and project management expertise to assist in meeting with property owners to discuss site-specific flood risk reduction options Provision of project management expertise as-needed Best practices |
| Data gathering and maintenance | Funding resources | Funding for studies (e.g., H&H studies, future flood risk studies) |
| | Data management, analysis, and technical expertise | Unified quality control procedures for data collection and evaluation, including models Technical modeling assistance for flood maps Ongoing trainings on mapping tools |

| Functional Area | Type of Support Requested | Examples Provided |
|---|---------------------------|---|
| Data gathering and maintenance | Data storage | State GIS clearinghouse Data portal/data library Network of stream gauges to access online Regional housing of data for all areas within a watershed |
| | Staff resources | An ombudsman at the state level to check data |
| Long-term operations and/or maintenance of past/present/future acquisition projects | Funding resources | Dedicated funding source for maintenance |
| Existing project maintenance programs (e.g., stormwater/drainage maintenance programs, canal project maintenance programs, levee safety programs, etc.) | Funding resources | Funding for local staffing |
| | Technical support | Adequate equipment/units Assistance with breakdowns and mobilization to speed construction time |

4.0 Implementation Roadmap

The Louisiana Watershed Initiative and CPRA are in the process of developing implementation plans for, or directly implementing, multiple strategies recommended through this assessment. Other strategies must be evaluated in the long-term for appropriateness and feasibility. Recommended strategies and their status are listed below, in addition to which objective(s) each strategy aims to address.

Table 5: Summary of Strategies

| Objective(s) | Strategy | Status |
|-------------------------|---|----------------------|
| 1.1, 2.3 | Support local staff capacity through regional/watershed-level staff support | Strategy in progress |
| 1.2, 1.4, 3.1, 3.2, 4.3 | Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy | Strategy in progress |
| 4.1, 4.2 | Develop an "Everything Flood-Related" website for public, local, state, and other stakeholder use | Strategy in progress |
| 2.3, 4.2 | Pursue streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions | Strategy in progress |
| 1.1 | Provide state-facilitated trainings and outreach to local staff | Strategy in progress |
| 1.3 | Accelerate funding processes for all types of flood mitigation projects | Near-term strategy |
| 1.3, 4.1 | Unify state grant program application and implementation processes wherever possible | Near-term strategy |
| 3.1, 4.1 | Publish materials that support capability building around flood resilience | Near-term strategy |

Parish Flood Risk and Resilience Capability and Capacity Assessment

| Objective(s) | Strategy | Status |
|--------------------|--|-----------------------------|
| 1.2, 1.3, 2.1, 3.2 | Develop a federal program/policy advocacy plan based on local needs | Near-term strategy |
| 2.2 | Facilitate alignment of parish policies and actions toward local, state, and regional flood risk reduction objectives | Near-term strategy |
| 2.3 | Facilitate watershed-level coordination | Near-term strategy |
| 2.1 | Implement state actions that can increase CRS credits statewide | Strategy to be investigated |
| 1.1 | Pilot a university apprenticeship program to specifically support parishes and municipalities in their flood risk reduction related activities (projects and programs) | Strategy to be investigated |
| 3.2, 4.3 | Facilitate cross-training to build capacity | Strategy to be investigated |
| 1.1 | Pilot a state or regional suite of experts to form a “temp agency” for local staff support | Strategy to be investigated |
| 1.1, 1.3, 1.4 | Establish a dedicated, non-competitive multi-year (~five) or annual, proactive (state or federal) funding stream for flood risk reduction activities | Strategy to be investigated |
| 2.1, 2.3 | Develop, implement, and enforce state-level floodplain management policies | Strategy to be investigated |
| 2.1 | Incentivize the private market to make flood resilient decisions | Strategy to be investigated |

4.1 Strategies in Progress

Support local staff capacity through regional/watershed-level staff support. The Louisiana Watershed Initiative's cooperating agencies are developing job descriptions and a funding plan to hire regional staff to support watershed-based planning and management across the state. The purpose of hiring these regional staff is to improve and streamline connectivity to technical support and decision-makers, as opposed to interjecting another institutional layer between parishes and the State.

Develop and implement a comprehensive, coordinated, statewide outreach, education, and engagement strategy. The Louisiana Watershed Initiative's cooperating agencies are in the process of developing and implementing this strategy, which requires development of an engagement advisory committee comprised of state and federal agency representatives, subject matter experts, as well as regional, professional, local, and academic organizations. This committee will be responsible for the following:

- Promoting a unified effort to address flooding issues across the state
- Developing an approach to watershed-based floodplain management that leverages and builds on the knowledge of local constituents, professional organizations, governmental entities, not-for-profits, universities, and other stakeholders
- Reviewing and commenting on engagement strategies developed by the Louisiana Watershed Initiative's technical advisory committees

The committee may be able to advance key recommendations of the assessment, including:

- Supporting a forum for local to state feedback
- Ensuring broad public engagement in state program development
- Ensuring engagement of the following:
 - Elected officials
 - Key sectors (e.g., developers, homebuilders, appraisers, realtors, finance institutions, insurance)
 - The general public
 - Professional associations (e.g., American Planning Association (APA), American Society of Civil Engineers (ASCE), Association of State Floodplain Managers (ASFPM), Natural Hazards Mitigation Association (NHMA))
 - Local and regional government and non-government entities

Develop an "Everything Flood-Related" website for public, local, state, and other stakeholder use. The Louisiana Watershed Initiative's cooperating agencies are working on a plan for a website that is in alignment with the feedback received through this assessment, as well as the engagement process for the Louisiana Watershed Initiative's Phase I investigation. The website is expected to:

- Provide links to flood-related resources within and outside the state
- Provide links to data needed to understand flood risk and evaluate projects
- Provide links to flood risk and resilience-related publications

An interim website focused on supporting program transparency, engagement, and education will be live in the fall of 2018, and will include information about how to get involved in the Louisiana Watershed Initiative, as well as:

- Overview on state efforts to date

- Resources for citizens, jurisdictions, and stakeholders
- Upcoming events involving the program or cooperating agencies
- How to get involved, such as through email lists, social media, and more

Pursue streamlined, watershed-based modeling and data gathering needed to make appropriate land use and project decisions. The Council on Watershed Management has assembled a data technical advisory committee and is initiating an engagement process with parishes and municipalities to identify statewide and watershed-based data needs. In the fall of 2018, workshops will be held around the state to discuss data.

The Louisiana Watershed Initiative's cooperating agencies are developing a funding strategy for the development of hydraulic and hydrologic modeling of watersheds statewide to help parishes address flood risk and conduct watershed-based floodplain management. The Amite watershed is in the process of being modeled, and modeling for other watersheds is expected to begin early next year if funding is appropriately allocated. These models will be accessible to parish staff and other professionals and intended for use with project, development, and land use decision-making. Planning and policy technical advisory committees are being established in late summer/early fall to help clarify how data can and should be used in project and land use decision-making. There will be workshops and engagement opportunities associated with these efforts.

Statewide collection of new, high quality LiDAR is currently in progress, as well as a plan to place stream gauges.

Provide state-facilitated trainings and outreach to local staff. The cooperating agencies within the Louisiana Watershed Initiative actively conduct and facilitate trainings and outreach to local staff. CPRA is communicating the findings of the assessment to help these agencies refine existing related services, as needed, and to identify needs for new initiatives. Participants requested the following training topics, for example:

- Procurement requirements
- Benefit-cost analyses
- Implementation of FEMA, HUD, and/or other state mitigation or disaster recovery grants
- Project funding applications
- Long-term operations/maintenance of acquisition projects
- Data management
- Outreach and engagement for nonstructural projects

Example Trainings

GOHSEP provides an ongoing series of trainings, events, and short courses on a variety of topics based on GOHSEP's focus areas, including disaster preparation, prevention, planning and management, and recovery. A calendar and registration information are continually updated on their website.

OCD currently holds workshops to walk participants through the application process for the Louisiana Community Development Block Grant Program.

CPRA conducts trainings on its Master Plan Data Viewer to guide communities and local staff through the data portal to find information on their flood risk, mitigation projects, land change, social vulnerability, and resources to reduce risk.

In addition to these, FEMA's **Emergency Management Institute (EMI)** provides trainings on a variety of topics related to hazards and disasters and covers most of the costs of travel.

4.2 Near-Term Strategies

The Council on Watershed Management has convened a working group consisting of representatives from the five council agencies. One of the charges of the working group is to identify methods to align existing programs with the mission of the Louisiana Watershed Initiative. Two strategies that have been identified for contemplation by the working group include:

- Investigating mechanisms to accelerate funding processes for all types of flood mitigation projects
- Investigating mechanisms to unify state grant program application and implementation processes, wherever possible

Some of the options to be explored by the working group include:

- Investigating methods to unify and streamline program processes in alignment with the Louisiana Watershed Initiative goals and objectives
- Exploring the use of a unified online application and grant management portal. For the 2017 Master Plan, CPRA investigated the requirements for such a portal and has put together draft parameters that could be leveraged toward this effort
- Contemplating a centralized funding clearing house that could accept a base application and then poll or inquire throughout the state agencies to find available funding within program constraints. The working group is expected to explore the feasibility of this effort in the near-term as the "Everything Flood-Related" website and data portal are developed
- Pursue online policy and project transparency through the "Everything Flood-Related" website and data portal. Procedures, policies, and key guidance will be posted on the website, among other resources

The Louisiana Watershed Initiative and coordinating agencies are working toward the following actions in the near term.

Publish materials that support capability building around flood resilience. The Council has plans to investigate potential materials and begin developing or refining and publishing these items, as needed, beginning early 2019.

Develop a federal program/policy advocacy plan based on local needs. The Council and its engagement, policy, and projects advisory committees will be making recommendations toward the development of this plan, through engagement activities, in the near-term.

Facilitate alignment of parish policies and actions toward local, state, and regional flood risk reduction objectives. The Council is in the process of establishing policy and planning advisory committees to support this strategy.

4.3 Strategies to be Investigated for Appropriateness and Feasibility

The following strategies are more long-term and require further evaluation to better understand the appropriate options and course of action.

Implement state actions that can increase Community Rating System (CRS) credits statewide. Further coordination with DOTD is required to determine the appropriate course of action related to this strategy.

Pilot a university apprenticeship program to specifically support parishes and municipalities in their flood risk reduction-related activities (projects and programs). The responsibility to implement this will likely fall on universities. CPRA has a Coastal Science Assistantship Program (CSAP) that provides assistantships for up to three years to support Master of Science students that are enrolled full-time at Louisiana colleges/universities and involved in science or engineering research relevant to Louisiana coastal protection and restoration efforts. This approach could be used as a model for other state agencies. This recommendation will be evaluated for potential piloting in the near future. Universities may partner with parishes to facilitate university-parish apprenticeships or expand existing university internship programs. This approach will be recommended through the Louisiana Watershed Initiative's engagement process with universities. One option would be for universities to hold meetings with parishes to discuss how to integrate any additional or emerging parish needs into ongoing curriculum, research centers, and/or other programs that already exist.

Facilitate cross-training to build capacity. Cross-training is an excellent way to increase capacity and reduce risks associated with staff turnover without adding significant cost. Cross-training also helps build trust and understanding between entities. Cross-training already occurs within some state agencies and is encouraged. Significantly, vertical cross-training between parish staff and state agencies can help build the trust and common understanding that is crucial to inclusive and adaptive long-term decision-making across the state. Further investigation is needed to understand the role the State should play, if any, in facilitating cross-training within and between parishes, between state agencies, between parishes and state agencies, as well as with other entities. This concept will be investigated as part of the expanded capacity and capability planning happening within the Louisiana Watershed Initiative.

Pilot a sub-state regional (e.g., watershed-based) suite of experts to form a "temp agency" for local staff support. More investigation is needed to understand the most frequent and urgent needs statewide for such support to help determine the number and types of staff required and the feasibility of this strategy long-term.

Establish a dedicated, non-competitive multi-year (~five) or annual, proactive (state or federal) funding stream for flood risk reduction activities. This strategy is a high priority for both CPRA and the Council. Coordination and investigation will be required to determine the feasibility of establishing annual resilience funding in the near-term. This is likely a longer-term goal.

Develop, implement, and enforce state-level floodplain management policies. This strategy is in the process of being investigated through the Louisiana Watershed Initiative. Extensive engagement will be required, including engagement with the Louisiana Floodplain Management Association (LFMA), and the Louisiana Watershed Initiative is in the process of establishing a policy technical advisory committee in the near-term to explore state-level floodplain management policies further.

Incentivize the private market to make flood-resilient decisions. Further investigation is required to understand what the State can and should do to help developers, homebuilders, banks and lenders, and insurers make flood-resilience related decisions. This investigation will be taking place within Louisiana Watershed Initiative engagement processes.

5.0 Conclusion

The assessment revealed the strengths of the 24 coastal and near-coastal Louisiana parishes, as well as areas where additional support can be leveraged into long-term resilience against floods. Participants provided critical insight into ways existing state programs might adapt to more effectively meet the needs of parishes, and how new initiatives can be built to serve Louisiana's needs. Many of the recommendations developed with participants align with actions being actively adopted or further investigated. CPRA is continuing to share feedback with both the Louisiana Watershed Initiative and specific agencies, to investigate how further support can be provided in alignment with the recommendations, and to determine how resources can be leveraged toward the common mission of flood risk reduction in the state of Louisiana.

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Appendices

Appendix A: Online Survey

Appendix B: Interview

Appendix C: Workshop



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FLOOD RISK AND RESILIENCE PROGRAM

Appendix A: Online Survey



Report: Version I

Date: August 2018

Prepared By: Carly Foster, Annis Saniee, and James Cottone

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List of Abbreviations

| | |
|---------|--|
| ABFE | Advisory Base Flood Elevation |
| AEC | Area of Environmental Concern |
| BFE | Base Flood Elevation |
| CDBG | Community Development Block Grant |
| CDBG-DR | Community Development Block Grant Disaster Recovery |
| CFM | Certified Floodplain Manager |
| CPRA | Coastal Protection and Restoration Authority |
| CRMS | Coastwide Reference Monitoring System |
| CRS | Community Rating System |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| FMA | Flood Mitigation Assistance |
| GIS | Geographic Information System |
| GOMESA | Gulf of Mexico Energy Security Act |
| HMGP | Hazard Mitigation Grant Program |
| HUD | U.S. Department of Housing and Urban Development |
| ICC | Increased Cost of Compliance |
| IMCAL | Imperial Calcasieu Regional Planning and Development District |
| LAMP | Levee Analysis and Mapping Procedure |
| LDNR | Louisiana Department of Natural Resources |
| LiDAR | Light Detection and Ranging |
| LMI | Low to Moderate Income |
| LSU | Louisiana State University |
| MOU | Memorandum of Understanding |
| NFIP | National Flood Insurance Program |
| NIMSAT | National Incident Management Systems and Advanced Technologies Institute |

Parish Flood Risk and Resilience Capability and Capacity Assessment

| | |
|---------|---|
| NOAA | National Oceanic and Atmospheric Administration |
| OCD-DRU | Office of Community Development Disaster Recovery Unit |
| PA | Public Assistance |
| PDM | Pre-Disaster Mitigation Grant Program |
| RL | Repetitive Loss |
| SDMI | Stephenson Disaster Management Institute |
| SRL | Severe Repetitive Loss |
| STARC | Saint Tammany Association for Retarded Citizens |
| UL | University of Louisiana at Lafayette |
| UNO | University of New Orleans |
| USACE | U.S. Army Corp of Engineers |
| USGS | U.S. Geological Survey |
| WSLP | West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction |

1.0 Introduction

As part of the Parish Flood Risk and Resilience Capability and Capacity Assessment, a comprehensive, six-part online survey was created to obtain information on six key topic areas, including requests for needed support within those topic areas. The survey was drafted in March 2018 and completed by parish staff from April to June 2018. The online survey consisted of a wide variety of question types, including multiple choice, rating, and short and long open-text answers, to encompass a comprehensive spectrum of topics relating to flood risk management.

The online survey was composed of the following sections and subsections:

- 1.0 Staff
 - 1.1 Staff for Nonstructural Mitigation Projects
 - 1.2 Staff and Staff Coordination Related to Flood Risk Reduction Plans, Policies, and Programs
- 2.0 Funding
 - 2.1 Availability and Scope of Funding for Residential Elevation, Residential Voluntary Acquisition, and Non-residential Floodproofing Projects
 - 2.2 Grant Management Capacity
 - 2.3 Availability and Scope of Funding for Other Resilience Policies and Programs
- 3.0 Mitigation History
 - 3.1 Local Awareness of Flood Risk and Planning and Mitigation Needs
 - 3.2 Mitigation History
 - 3.3 Project Maintenance
- 4.0 Flood Damage Prevention Policies and Programs
 - 4.1 Flood Risk Reduction Plans and Policies
 - 4.2 Public and Political Support and Incentives
 - 4.3 Implementation of Flood Risk Management Standards
- 5.0 External Relations
- 6.0 Data Gathering and Maintenance

2.0 Online Survey Results

This appendix provides key results and summaries of the online survey in narrative, bulleted, and tabular formats.

To better understand the information presented, please note that numbers presented in the tables refer to the frequency of parish responses, unless otherwise indicated. Given that the questions in the survey were all voluntary, the number of total responses varies by question. It is acknowledged that these results are not statistically significant and that any percentages derived must be considered in this context. As a case study with a small sample size, and with inevitable bias involved in parish selection of questions for response, CPRA and Arcadis have deemed it most appropriate to convey most results in the form of frequencies of positive response, i.e., how many responding parishes said "X." Results are given in the form of frequency of responses over the total number of parishes responding to that question.

In some cases (table rows will indicate "see key" in applicable circumstances), percentages represent averaged responses based on a spectrum of possible answers. The spectra used are clarified in the sections in which they are used.

2.1 Nonstructural Project Implementation

The following table is a compilation of results across the survey's six main sections relating to the implementation of nonstructural projects. Overall, the clear trend was that residential elevations are of higher priority in most parishes than both residential acquisitions and non-residential floodproofing project types, and that capacity for and history of implementing residential elevations is also higher in most parishes.

Key:

- Degree to which project type is considered a priority:
 - 0% - Not a priority
 - 33.3% - Some importance but not a priority
 - 66.7% - Important and a priority
 - 100% - A fundamental and critical priority

Table 1: Nonstructural Project Implementation

| | RESIDENTIAL ELEVATIONS | RESIDENTIAL ACQUISITIONS | NON-RESIDENTIAL FLOODPROOFING |
|--|------------------------|--------------------------|-------------------------------|
| Note: fractions indicate the number of responding participants | | | |
| <u>What is the maximum number of structures that could be mitigated with...</u> | | | |
| Existing parish staff: | | | |
| None | 3/16 | 7/16 | 5/16 |
| 10 structures | 3/16 | 3/16 | 7/16 |
| 25 structures | 5/16 | 3/16 | 1/16 |
| 50 structures | 0/16 | 0/16 | 0/16 |
| >50 structures | 4/16 | 2/16 | 1/16 |
| Need support understanding capacity | 1/16 | 1/16 | 2/16 |
| Existing partnerships & Memorandums of Understanding (MOUs): | | | |
| None | 8/15 | 10/15 | 8/15 |
| 10 structures | 0/15 | 1/15 | 1/15 |
| 25 structures | 3/15 | 1/15 | 2/15 |
| 50 structures | 0/15 | 0/15 | 0/15 |
| >50 structures | 3/15 | 2/15 | 2/15 |
| Need support understanding capacity | 1/15 | 1/15 | 2/15 |
| Existing contract capacity: | | | |
| None | 3/15 | 7/15 | 4/15 |
| 10 structures | 2/15 | 1/15 | 2/15 |
| 25 structures | 1/15 | 0/15 | 0/15 |
| 50 structures | 0/15 | 0/15 | 0/15 |
| >50 structures | 8/15 | 6/15 | 7/15 |
| Need support understanding capacity | 1/15 | 1/15 | 2/15 |
| Degree to which project type is considered a priority (see key) | | | |
| | 72.90% | 29.20% | 47.90% |
| How many specific structures identified for future implementation? | | | |
| 0 structures | 1/15 | 7/15 | 5/15 |
| 1-10 structures | 3/15 | 4/15 | 6/15 |
| 11-25 structures | 1/15 | 1/15 | 0/15 |
| 26-50 structures | 1/15 | 1/15 | 0/15 |
| >50 structures | 9/15 | 1/15 | 1/15 |
| Need support to identify | 0/15 | 1/15 | 3/15 |
| How many identified structures have an identified funding source? | | | |
| 0 structures | 3/15 | 8/15 | 10/14 |
| 1-10 structures | 3/15 | 5/15 | 3/14 |
| 11-25 structures | 3/15 | 2/15 | 0/14 |
| 26-50 structures | 1/15 | 0/15 | 0/14 |
| >50 structures | 5/15 | 0/15 | 0/14 |

| | RESIDENTIAL ELEVATIONS | RESIDENTIAL ACQUISITIONS | NON-RESIDENTIAL FLOODPROOFING |
|---|------------------------|--------------------------|-------------------------------|
| <i>Need support understanding options</i> | 0/15 | 0/15 | 1/14 |
| How many property owners have been engaged for identified structures? | | | |
| <i>0 structures</i> | 3/15 | 8/15 | 10/15 |
| <i>1-10 structures</i> | 1/15 | 2/15 | 3/15 |
| <i>11-25 structures</i> | 2/15 | 3/15 | 0/15 |
| <i>26-50 structures</i> | 2/15 | 1/15 | 0/15 |
| <i>>50 structures</i> | 7/15 | 1/15 | 0/15 |
| <i>Need support engaging</i> | 0/15 | 0/15 | 2/15 |
| Plan to develop/submit grant applications in the next fiscal year? | | | |
| <i>No</i> | 3/15 | 7/15 | 5/15 |
| <i>Haven't decided / not sure</i> | 3/15 | 3/15 | 7/15 |
| <i>Yes, with support from contract consultant</i> | 5/15 | 2/15 | 1/15 |
| <i>Yes, in-house staff will complete the application</i> | 4/15 | 3/15 | 2/15 |
| Which funding source? | | | |
| <i>HMGP</i> | 7/10 | 5/8 | 3/6 |
| <i>FMA</i> | 6/10 | 3/8 | 3/6 |
| <i>PDM</i> | 1/10 | 0/8 | 1/6 |
| <i>CDBG</i> | 0/10 | 1/8 | 0/6 |
| Number of structures mitigated by parish over last 5 years (including parish-funded/grant-funded projects) | | | |
| <i>0 structures</i> | 2/14 | 7/14 | 10/14 |
| <i>1-10 structures</i> | 3/14 | 4/14 | 4/14 |
| <i>11-25 structures</i> | 2/14 | 1/14 | 0/14 |
| <i>26-50 structures</i> | 2/14 | 1/14 | 0/14 |
| <i>>50 structures</i> | 5/14 | 1/14 | 0/14 |
| <i>We don't track this information</i> | 0/14 | 0/14 | 0/14 |
| Number of structures mitigated in parish over last 5 years (not completed by or in close coordination with parish) | | | |
| <i>0 structures</i> | 4/14 | 7/13 | 7/14 |
| <i>1-10 structures</i> | 1/14 | 1/13 | 2/14 |
| <i>11-25 structures</i> | 1/14 | 1/13 | 0/14 |
| <i>26-50 structures</i> | 1/14 | 0/13 | 0/14 |
| <i>>50 structures</i> | 2/14 | 0/13 | 0/14 |
| <i>We don't track this information</i> | 5/14 | 4/13 | 5/14 |
| Was LMI a factor in selection of structures? | | | |
| <i>No</i> | 10/13 | 11/12 | 12/13 |
| <i>Not sure</i> | 0/13 | 0/12 | 1/13 |
| <i>Yes, required by funding source</i> | 1/13 | 1/12 | 0/13 |
| <i>Yes, but not required by funding source</i> | 2/13 | 0/12 | 0/13 |
| <u>Effectiveness at mitigating the following types of risk in your parish...</u> | | | |
| | | | |
| Hurricanes / Tropical Storms | | | |

| | RESIDENTIAL ELEVATIONS | RESIDENTIAL ACQUISITIONS | NON-RESIDENTIAL FLOODPROOFING |
|-----------------------------|------------------------|--------------------------|-------------------------------|
| <i>Not applicable</i> | 2/15 | 6/15 | 6/15 |
| <i>Ineffective</i> | 0/15 | 1/15 | 0/15 |
| <i>Somewhat ineffective</i> | 0/15 | 0/15 | 2/15 |
| <i>Somewhat effective</i> | 6/15 | 1/15 | 5/15 |
| <i>Effective</i> | 7/15 | 7/15 | 2/15 |
| High Tides | | | |
| <i>Not applicable</i> | 4/15 | 7/15 | 7/15 |
| <i>Ineffective</i> | 1/15 | 1/15 | 0/15 |
| <i>Somewhat ineffective</i> | 0/15 | 0/15 | 1/15 |
| <i>Somewhat effective</i> | 2/15 | 0/15 | 2/15 |
| <i>Effective</i> | 8/15 | 7/15 | 5/15 |
| Stormwater Flooding | | | |
| <i>Not applicable</i> | 2/15 | 6/15 | 6/15 |
| <i>Ineffective</i> | 0/15 | 1/15 | 0/15 |
| <i>Somewhat ineffective</i> | 0/15 | 0/15 | 1/15 |
| <i>Somewhat effective</i> | 2/15 | 0/15 | 2/15 |
| <i>Effective</i> | 11/15 | 8/15 | 6/15 |
| Riverine Flooding | | | |
| <i>Not applicable</i> | 5/15 | 6/14 | 8/15 |
| <i>Ineffective</i> | 0/15 | 1/14 | 0/15 |
| <i>Somewhat ineffective</i> | 0/15 | 0/14 | 0/15 |
| <i>Somewhat effective</i> | 2/15 | 0/14 | 5/15 |
| <i>Effective</i> | 8/15 | 7/14 | 2/15 |

2.2 Staff

2.2.1 Staff and Departments

- Average number of staff responsible for supporting residential elevation, voluntary acquisition, and non-residential floodproofing project types = 4
 - Relevant staff largely include civil servants (12/17 respondents); 6/17 of parishes also include contract consultants in this list
 - An average of 31% of staff time is typically dedicated to related activities
 - An average of 38% of staff time could be dedicated to related activities
- Average number of staff responsible for supporting any other flood mitigation project types = 5
 - An average of 54% of staff time is typically dedicated to related activities
 - An average of 57% of staff time could be dedicated to related activities

2.2.2 Regional Planning/Partnerships/MOUs

- 13/15 said they do participate in regional planning activities or are a member of a regional planning organization(s)
 - 4x South Central Planning & Development Commission
 - 3x New Orleans Regional Planning Commission
 - 2x Acadiana Planning Commission
 - 1x Imperial Calcasieu Regional Planning and Development District (IMCAL)
 - 1x Southwest Louisiana Entrepreneurial & Economic Development Alliance

Partnerships and Memorandums of Understanding (MOUs) to support project application and implementation of project types:

- Residential Elevations
 - 2/14: Regional Planning Commission
 - 1/14: Municipality
 - 1/14: UNO
- Residential Voluntary Acquisition
 - 1/14: Municipality
- Non-residential floodproofing
 - 1/14: Regional Planning Commission
- Other flood risk reduction project types
 - 7/14: Regional Planning Commission
 - 5/14: Neighboring Parish
 - 3/14: Municipality
 - 1/14: Metropolitan Planning Organization

2.2.3 Contract Capacity

Most parishes indicated they have sufficient contract capacity in the near term (over the next year) to support project applications and implementation of nonstructural and other flood risk reduction project types.

- The parishes responded to whether they had contract capacity over the next year to support project funding applications for the below project types:
 - Residential elevations: 13/16 said yes
 - Residential acquisitions: 9/16 said yes
 - Non-residential floodproofing: 11/16 said yes
 - Other project types: 13/15 said yes
- The parishes responded to whether they had contract capacity over the next year to support implementation of the below project types:
 - Residential elevations: 11/16 said yes
 - Residential voluntary acquisitions: 5/15 said yes
 - Non-residential floodproofing: 9/16 said yes
 - Other project types: 12/15 said yes

2.2.4 Assistance Needed

Parishes were given the opportunity to indicate different types of assistance they feel they require for various project types and functional areas. Parishes selected from a variety of options included in the survey. They were also provided the opportunity to write in their own type of assistance. Included below are the types of assistance, pre-given as options, with the highest number of responses, in addition to written-in options. Pre-given options with results of less than five responses are not included.

Nonstructural projects

- Staff/organizational assistance needed to develop and implement a project of any size (nonstructural) that could be reasonably expected within the parish:
 - 9/16: Grants Management
 - 9/16: Outreach & Engagement Support
 - 8/10: Funding Resources
 - 8/16: Data Management
 - 7/16: Project Funding Applications
 - 7/16: Project Management
 - 6/10: Technical Support
 - 6/10: Models and/or Data
 - Program administrative guidelines (including procurement; OCD-DRU Admin Manual as an example)
 - SOPs
 - Technical support for BCAs
 - Other:
 - Clear and concise procurement guidelines provided upfront
 - Information on eligible properties (addresses, GIS shapefiles, etc.) which would allow for local review of the current status of the property
 - Able to handle existing amount of nonstructural activities, but are at maximum capacity. Would need increased funding/program management for increased nonstructural activity

Other project types

- Staff/organizational assistance needed to develop and implement a project of any size (other project types) that could be reasonably expected within the parish:
 - 11/12: Funding Resources
 - 9/14: Project Funding Applications
 - 8/14: Project Management
 - 8/14: Outreach & Engagement Support
 - 7/14: Grants Management
 - 7/14: Data Management/Collection
 - 7/12: Contract/Consultant Support
 - 6/12: Models and/or Data
 - Current structural conditions
 - More accessibility to existing data

2.2.5 Staff in Plans, Policies, and Programs

The following table includes results from the survey on questions regarding staff, staff proficiency, staff coordination, and needed staff assistance for staff working in a variety of plans, policies, and programmatic areas. To aid in drawing out key findings, the table highlights the lowest and highest scores for each respective series of questions. The lowest scores are highlighted in red and the highest in blue. The cutoff for what qualifies as “lowest” and what qualifies as “highest” varies for each series of questions, but is roughly based on the lowest and highest quartile for each series of questions.

For example, the questions series on staff proficiency with FEMA FIRMs has a minimum percent proficiency result of 57% and a maximum of 83%. Split into quartiles around a median value of 66%, these results can be categorized as follows:

- Lowest quartile: 57-63%
- Highest quartile: 80-83%

The results falling into the lowest quartile are highlighted in red, while those falling into the highest quartile are highlighted in blue. This mode of analysis is only applicable to some question series. Further, the three question series regarding assistance needed are each treated as a whole in the determination of their quartiles. It is worth noting that the highest quartile responses for some question series are sometimes near in value to the lowest quartile responses for other question series.

Some key takeaways are as follows:

- On average, parishes have fewer staff for NFIP CRS, local coastal zone management, natural resource and/or open space management, and review of local development/substantial improvement plans for compliance with flood damage prevention policy. They are generally well-staffed for building permitting, building code enforcement, and local flood damage prevention policy enforcement.
- Staff overall have a lower degree of proficiency with understanding Coastal Master Plan mapped flood risk than with FEMA FIRMs. The least proficient in the latter are staff working in building code enforcement, NFIP CRS, capital improvement plan development and management, and review of local development/substantial improvement plans for compliance with flood damage prevention policy. Staff working in hazard mitigation plan development and maintenance, building permitting, and local flood damage

prevention policy enforcement are generally highly proficient with FEMA FIRMs, but less so with Coastal Master Plan-mapped flood risk.

- The planning/policy area that takes the lowest average priority amongst parishes is natural resource and/or open space management. Comprehensive plan development and maintenance, capital improvement plan development and management, and stormwater management are tied for the highest priority, on average.
- On average, parishes ranked staff working in building permitting, NFIP CRS, and stormwater management as having the highest degree of coordination with other programmatic areas, although NFIP CRS joins natural resource and/or open space management as being ranked the lowest in importance for cross-coordination.
- With regard to staff-specific assistance needed to help develop, implement, and enforce these various planning, policy, and programmatic areas, across the board, parishes resoundingly requested funding resources, while a minority of parishes requested models and/or data.

Key:

- Staff proficiency percentage scale:
 - 0% - Not yet using
 - 25% - Beginning
 - 50% - Developing
 - 75% - Proficient
 - 100% - Advanced
- Degree of priority:
 - 0% - Not a priority
 - 33.3% - Some importance but not a priority
 - 66.7% - Important and a priority
 - 100% - A fundamental and critical priority
- Degree of coordination:
 - 0% - Coordination unclear or not existent
 - 33.3% - Some information coordination
 - 66.7% - Informal mechanism for transparent and regular coordination
 - 100% - Formal mechanism for transparent and regular coordination

Table 2: Staff in Plans, Policies, and Programs

| | Comprehensive Plan Development and Maintenance | Hazard Mitigation Plan Development and Maintenance | Building Permitting | Building Code Enforcement | Local Flood Damage Prevention Policy Enforcement | Review of Local Development/Substantial Improvement Plans for Compliance with Flood Damage Prevention Policy | NFIP CRS | Local Coastal Zone Management | Capital Improvement Plan Development and Management | Natural Resource and/or Open Space Management | Stormwater Management |
|---|--|--|---------------------|---|---|--|----------|----------------------------------|---|---|--------------------------|
| Key: | | | | | | | | | | | |
| LOWEST QUARTILE | | | | | | | | | | | |
| HIGHEST QUARTILE | | | | | | | | | | | |
| Average number of staff responsible for supporting | | | | | | | | | | | |
| | 6 | 7 | 8 | 8 | 8 | 3 | 2 | 3 | 7 | 3 | 7 |
| How many parishes use... | | | | | | | | | | | |
| Political appointees | 7 | 8 | 6 | 6 | 4 | 4 | 3 | 6 | 6 | 2 | 6 |
| Civil servants | 13 | 11 | 14 | 13 | 14 | 13 | 8 | 10 | 9 | 7 | 9 |
| Contract consultants | 8 | 4 | 2 | 5 | 2 | 1 | 1 | 3 | 3 | 1 | 3 |
| Staff proficiency with FEMA FIRMs | | | | | | | | | | | |
| Not yet using | 1 | 0 | 0 | 2 | 0 | 1 | 4 | 2 | 2 | 3 | 2 |
| Beginning | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 1 |
| Developing | 1 | 2 | 1 | 3 | 0 | 0 | 0 | 2 | 2 | 4 | 4 |
| Proficient | 8 | 7 | 8 | 7 | 10 | 8 | 3 | 5 | 6 | 4 | 3 |
| Advanced | 3 | 5 | 6 | 3 | 5 | 4 | 8 | 5 | 3 | 3 | 5 |
| % proficiency (avg) | 66% | 80% | 83% | 65% | 83% | 73% | 68% | 63% | 60% | 57% | 63% |
| Staff proficiency with understanding future Coastal Master Plan mapped flood risk | | | | | | | | | | | |
| Not yet using | 3 | 3 | 4 | 6 | 4 | 5 | 6 | 4 | 6 | 4 | 5 |
| Beginning | 5 | 0 | 3 | 2 | 1 | 3 | 1 | 0 | 2 | 2 | 0 |
| Developing | 3 | 4 | 2 | 3 | 5 | 5 | 3 | 4 | 3 | 3 | 7 |
| Proficient | 1 | 5 | 4 | 2 | 3 | 0 | 3 | 5 | 2 | 3 | 1 |
| Advanced | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| % proficiency (avg) | 43% | 58% | 45% | 37% | 47% | 35% | 35% | 52% | 37% | 45% | 42% |
| Degree of priority of plan/policy/program | | | | | | | | | | | |
| | 69% | 64% | 67% | 67% | 67% | 67% | 60% | 64% | 69% | 50% | 69% |
| Degree of coordination with other programmatic areas | | | | | | | | | | | |
| | 64% | 57% | 72% | 69% | 67% | 62% | 72% | 64% | 63% | 67% | 73% |
| Degree of priority of cross-coordination | | | | | | | | | | | |
| | 58% | 57% | 67% | 67% | 67% | 64% | 47% | 62% | 64% | 48% | 64% |
| Assistance needed to develop | | | | | | | | | | | |
| Staff Hiring | 1 | 1 | 2 | 3 | 4 | 4 | 2 | 4 | 1 | 3 | 4 |
| Training | 1 | 2 | 4 | 4 | 4 | 4 | 5 | 4 | 1 | 6 | 4 |
| Technical Support | 5 | 5 | 3 | 3 | 4 | 5 | 9 | 5 | (incl. help in developing a plan in line with State plan) | 8 | 7 |
| Funding Resources | 10 | 11 | 7 | 6 | 9 | 7 | 8 | 9 | 9 | 9 | 10 |
| Models and/or Data | 4 (incl. H&H models) | 2 (incl. structure-specific flood risk data) | 0 | 0 | 2 | 2 | 2 | 2 (H&H models) | 1 | 3 (incl. development impact modeling) | 3 |
| Outreach and Engagement Support | 5 | 6 | 4 | 3 (incl. videos/materials for public education) | 4 | 5 | 6 | 3 | 1 | 6 | 6 |
| Contract/Consultant Support | 6 | 11 | 4 | 5 | 7 | 7 | 4 | 3 | 4 | 5 | 7 |
| Assistance needed to implement | | | | | | | | | | | |
| Staff Hiring | 1 | 1 | 3 | 2 | 5 | 3 | 2 | 6 | 1 | 4 | 4 |
| Training | 3 | 1 | 4 | 3 | 5 | 5 | 4 | 7 | 2 | 6 | 4 |
| Technical Support | 4 | 5 | 2 | 2 | 7 | 5 | 7 | 5 | 2 | 7 | 5 |
| Funding Resources | 9 | 10 | 7 | 6 | 8 | 6 | 8 | 10 | 7 | 9 | 9 |

| | Comprehensive Plan Development and Maintenance | Hazard Mitigation Plan Development and Maintenance | Building Permitting | Building Code Enforcement | Local Flood Damage Prevention Policy Enforcement | Review of Local Development/Substantial Improvement Plans for Compliance with Flood Damage Prevention Policy | NFIP CRS | Local Coastal Zone Management | Capital Improvement Plan Development and Management | Natural Resource and/or Open Space Management | Stormwater Management |
|------------------------------------|--|--|---------------------|------------------------------|---|--|----------|----------------------------------|---|---|---|
| Key: | | | | | | | | | | | |
| LOWEST QUARTILE | | | | | | | | | | | |
| HIGHEST QUARTILE | | | | | | | | | | | |
| Models and/or Data | 2 | 1 | 0 | 0 | 3 | 2 | 1 | 1 | 2 | 2 | 3 (incl. hydrologic modeling of drainage basins) |
| Outreach and Engagement Support | 5 | 5 | 3 | 2 | 3 | 4 | 4 | 4 | 2 | 6 | 7 |
| Contract/Consultant Support | 6 | 7 | 3 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 7 |
| | | | | | | | | | | | |
| Assistance needed to enforce | | | | | | | | | | | |
| Staff Hiring | 5 | 3 | 4 | 2 | 5 | 4 | | 5 | | 4 | 4 |
| Training | 6 | 3 | 5 | 4 | 6 | 6 | | 6 | | 6 | 4 |
| Technical Support | 3 | 6 | 4 | 1 | 8 | 4 | | 5 | | 7 | 4 |
| Funding Resources | 7 | 8 | 6 | 5 | 9 | 5 | | 10 | | 8 | 10 |
| Models and/or Data | 4 | 1 | 1 | 0 | 2 | 2 | | 1 | | 2 | 1 |
| Outreach and Engagement Support | 5 | 4 | 3 | 1 | 5 | 4 | | 4 | | 5 | 8 |
| Contract/Consultant Support | 1 | 5 | 5 | 4 | 5 | 5 | | 3 | | 3 | 5 |

2.2.6 Staff Cross-Coordination

For the following table, respondents indicated, under each plan or program, whether staff working with related responsibilities coordinate with staff working in other plans or programs. The number of respondents that indicated positive coordination are here equated as the number of "points" for each two-way relationship between two different plans or programs. Since each plan or program relationship was, in effect, rated twice (once in each direction), the number of points under each two-way relationship is the sum of total respondents indicating coordination in both questions. For example, in the subsection on "Building Permitting", respondents are requested to indicate whether staff working in Building Permitting coordinate with staff working in every other plan/program, including Local Coastal Zone Management. Ten respondents indicated positively on coordination with staff in Local Coastal Zone Management. In the later subsection on "Local Coastal Zone Management", respondents indicate whether staff working in Local Coastal Zone Management coordinate with staff working in every other plan/program, including Building Permitting. Nine respondents indicated positively for this latter relationship. Therefore, the total number of accrued "points" for the Building Permitting-Local Coastal Zone Management two-way relationship is $10 + 9 = 19$.

Like Section 2.2.5, two-way relationships that fall into the highest quartile with their number of points are highlighted in blue, whereas those that fall into the lowest quartile are highlighted in red. The absolute highest score is highlighted in a deeper shade of blue and the absolute lowest in a deeper shade of red.

Total points are sums of all the points each particular plan or program accrued throughout all of its various two-way relationships with different plans or programs. They are meant to indicate the plans/policies with the most and least points in cross-coordination, generally. These are also highlighted based on quartile.

The clear takeaways are:

- Staff working in building permitting, as well as review of local development/substantial improvement plans for compliance with flood damage prevention policy, coordinate most strongly with other planning and programmatic areas.
- Staff working in capital improvement plan development and management, as well as natural resource and/or open space management, appear to be the most isolated from other planning and programmatic areas.

This assessment is not intended to serve as a definitive study of coordination between planning and programmatic areas. It is merely meant to serve as a launching pad for further investigation. As recommended in one of the strategies included in the main body of this report, the State may want to consider undertaking a full and methodologically rigorous plan integration study at some point in the future.

Table 3: Staff Cross-Coordination

| | Comprehensive Plan Development and Maintenance | Hazard Mitigation Plan Development and Maintenance | Building Permitting | Building Code Enforcement | Local Flood Damage Prevention Policy Enforcement | Review of Local Development/Substantial Improvement Plans for Compliance with Flood Damage Prevention Policy | NFIP CRS | Local Coastal Zone Management | Capital Improvement Plan Development and Management | Natural Resource and/or Open Space Management | Stormwater Management |
|--|--|--|---------------------|------------------------------|--|--|----------|----------------------------------|---|---|--------------------------|
| LOWEST QUARTILE | | | | | | | | | | | |
| LOWEST SCORE | | | | | | | | | | | |
| HIGHEST QUARTILE | | | | | | | | | | | |
| HIGHEST SCORE | | | | | | | | | | | |
| Comprehensive Plan Development and Maintenance | | | | | | | | | | | |
| Hazard Mitigation Plan Development and Maintenance | 19 | | | | | | | | | | |
| Building Permitting | 20 | 18 | | | | | | | | | |
| Building Code Enforcement | 19 | 16 | 24 | | | | | | | | |
| Local Flood Damage Prevention Policy Enforcement | 17 | 20 | 22 | 20 | | | | | | | |
| Review of Local Development/Substant ial Improvement Plans for Compliance with Flood Damage Prevention Policy | 18 | 19 | 22 | 22 | 22 | | | | | | |
| NFIP CRS | 16 | 16 | 16 | 14 | 17 | 17 | | | | | |
| Local Coastal Zone Management | 19 | 16 | 19 | 17 | 18 | 19 | 14 | | | | |
| Capital Improvement Plan Development and Management | 13 | 16 | 10 | 8 | 11 | 11 | 12 | 12 | | | |
| Natural Resource and/or Open Space Management | 14 | 11 | 10 | 8 | 9 | 10 | 14 | 15 | 5 | | |
| Stormwater Management | 19 | 18 | 19 | 18 | 18 | 19 | 16 | 16 | 14 | 12 | |
| | | | | | | | | | | | |
| TOTAL (by plan type - column) | 174 | 169 | 180 | 166 | 174 | 179 | 152 | 165 | 112 | 108 | 169 |

Additional notes on this section:

- Two parishes use permitting software or online code violation programs which enable coordination. For one parish, regular reporting is required by departments on formal programs such as CRS and stormwater management protocols.
- For one small parish, overlapping duties of staff (e.g., between code enforcement and permitting/planning/floodplain management) enable coordination.
- One parish said CRS cannot be properly implemented without a multiagency cooperative effort.
- One parish said the local coastal zone management department is somewhat independent, but there is some informal coordination.
- One parish indicated that nearly everything requires stormwater review and approval. Another mentioned that their stormwater ordinance is referenced and enforced during permitting.

2.3 Funding

Survey respondents were asked to provide details and estimates of their existing and anticipated future financial capacities and capacities for grant management. Respondents provided details on available and anticipated funding streams to support local match for nonstructural projects, to implement and maintain nonstructural projects, and to implement and enforce other policies and programs. Additionally, they were asked to estimate current project costs as well as funding still needed. Further, respondents provided details on current grant programs being implemented. Finally, respondents were given the opportunity to request specific types of assistance for securing funding and grant management.

2.3.1 Funding for Nonstructural Projects

Does the parish anticipate requesting local match from property owners?

- Residential Elevation
 - 9/16 said yes, 2/16 said no, 5/16 weren't sure
 - Those that said yes indicated either 10% or 25% match
- Residential Acquisition
 - 5/15 said yes, 5/15 said no, 5/15 weren't sure
- Non-Residential Floodproofing
 - 5/15 said yes, 3/15 said no, 7/15 weren't sure

Available/accessible funding streams to support local match for residential elevation, residential acquisition, and/or non-residential floodproofing project implementation

- Funding streams:
 - 6/15: N/A
 - 4/15: 0.00
 - 2/15: Unknown
 - 2/15: Homeowner
 - 1/15: CDBG
- Amounts of funding available/accessible:

- 10 respondents, 8 answered with \$0 or \$1.00
- \$187,000 and \$1,000,000
- Average: \$118,700

Anticipated funding streams that may become available over the next several years to support local match

- Funding streams:
 - 8/14: N/A
 - 3/14: 0.00
 - 2/14: Unknown
 - 1/14: Private
- Amounts anticipated to become available over the next several years:
 - 9 respondents, 8 answered with \$0 or \$1.00
 - \$5,000,000 (1 parish)

Projects for which external funding is available, but for which local match is not currently available

- Project types:
 - FEMA FMA/HMGP/SRL elevation Programs (x3)
 - HMGP Gustav/Rita/Isaac application
 - Oysterbed Surge Protection System
 - Repetitive Loss Acquisitions
- Project costs for which external funding is available:
 - Total: \$29,187,728 (out of 7)
 - Average: \$4,169,675
- Match required:
 - Total: \$4,340,702 (out of 6)
 - Average: \$723,450

Total cost estimates for any parish identified/planned projects:

- Residential Elevation
 - 13 respondents, 2 answered with \$0
 - 2 parishes said they need help estimating costs
 - Total = \$164,300,000
 - Average = \$12,638,462 (including the 0's)
 - Median = \$6,000,000 (not including the 0's)
- Residential Acquisition
 - 10 respondents, 6 answered with \$0
 - 1 parish needs help estimating costs
 - Total = \$13,385,562
 - Average = \$1,338,556 (including the 0's)
 - Median = \$2,150,000 (not including the 0's)
- Non-Residential Floodproofing
 - 9 respondents, 6 answered with \$0
 - 3 parishes need help estimating costs

- Total = \$24,000,000 (3 parishes)
- Average = \$2,666,667 (including the 0's)

Amount of funding still needed and unidentified to implement identified projects:

- Residential Elevation
 - 11 respondents, 3 answered with \$0
 - Total = \$1,905,764,800
 - Average = \$173,251,345 (including the 0's)
 - Median = \$13,000,000 (not including the 0's)
- Residential Acquisition
 - 8 respondents, 7 answered with \$0
 - Total = \$8,000,000 (1 parish only)
 - Average = \$1,000,000 (including the 0's)
 - Median = \$8,000,000 (not including the 0's)
- Non-Residential Floodproofing
 - 7 respondents, 4 answered with \$0
 - Total = \$20,400,000 (3 parishes)
 - Average = \$2,914,286 (including the 0's)
 - Median = \$10,000,000 (not including the 0's)

Does the parish have funding sources identified for project maintenance?

- Residential Acquisition
 - 3/15 said yes, 6/15 said no, 6/15 weren't sure
 - Sources: Department Line Item; HMGP; Local
- Non-Residential Floodproofing
 - 3/13 said yes, 3/13 said no, 7/13 weren't sure
 - Sources: Parish, Property owner

2.3.2 Grant Management

FEMA Hazard Mitigation Grant Program (HMGP)

- Total amount of funding received over the last 5 years:
 - Total: \$191,844,259 (out of 14)
 - Average: \$13,703,161
 - Median: \$10,750,000
- Past issues/concerns:
 - Often unable to move forward due to match, or loss of income in volatile industries
 - People assume they can't afford the cost even before they ask for a quote. Don't know if they should invest or wait for another storm and a buyout
 - Inconsistency with FEMA representation/staffing due to their frequent relocations to the next disaster
 - Staff can't handle these entire programs without assistance

- Dissemination of programmatic information from FEMA/GOHSEP to parish has been difficult/caused delays

FEMA Pre-Disaster Mitigation Grant Program (PDM)

- Total amount of funding received over the last 5 years:
 - Total = \$8,610,944.50 (out of 8, 3 answered with \$0)
 - Average = \$1,076,368 (including the 0's)
 - Median = \$4,000,000 (not including the 0's)
- Suggested best practices:
 - Pre-qualify and educate the insurance industry/residents about importance of continuous insurance coverage
 - Making claims is critical to get SRL 100% status. Also teach about using ICC for matches for RL properties
- Past issues/concerns:
 - Short timeframe; anyone who needs match may delay
 - ICC in particular has issues with waivers

FEMA Flood Mitigation Assistance (FMA)

- Total amount of funding received over the last 5 years:
 - Total: \$123,885,767 (out of 10, 2 answered with \$0)
 - Average: \$12,388,577 (including the 0's)
 - Median: \$4,080,500 (not including the 0's)
- Past issues/concerns:
 - Concerns with homeowner requirements to have NFIP flood insurance; RL/SRL determination is only based on NFIP flood claims, not 3rd party flood claims
 - Some properties that flooded 3-4 times in 2017 alone are not on the RL/SRL list because of this; couldn't submit an FMA application

HUD CDBG-DR

- Total amount of funding received over the last 5 years:
 - Total: \$520,644,237 (out of 12)
 - Average: \$43,387,020
 - Median: \$15,000,000
- Past issues/concerns:
 - Dependent on a different grant from a different source; the timing is sometimes very stressful
 - Would appreciate more input in the development of new programs before they're designed/funded

Additional notes on this section:

- These are the significant funding programs which parish staff have experience implementing; 13/14 said there aren't any others.
 - One parish uses the DOTD Statewide Flood Control Program, having received \$8,458,027 in funding over last 5 years.

Assistance Requested for Grant Management

- The majority of respondents, or 10/14, said their parish needs assistance in building capacity to implement FEMA, HUD, and/or other federal or state mitigation or disaster recovery grants
- Types of assistance requested:
 - 8/10: Funding resources
 - 7/10: Training
 - 7/10: Technical support

2.3.3 Other Resilience Policies and Programs

Available funding streams to implement and enforce other resilience policies/programs

- Funding streams:
 - 6/12: N/A
 - 2/12: Parish General Fund
 - 1/12: CDBG-DR
 - 1/12: PDM
 - 1/12: Road and drainage millage
 - 1/12: LDNR's Local Coastal Program
- Policies/programs for which funding streams are available to implement and enforce (Respondents were able to select multiple. Options which only received one positive response are not included):
 - 4/13: Stormwater management
 - 3/13: Capital improvement plan
 - 3/13: NFIP CRS
 - 2/13: Comprehensive plan
 - 2/13: Hazard mitigation plan
 - 2/13: Local coastal zone management
- Amounts of funding available over the next fiscal year:
 - 12 respondents, 6 said \$0
 - Total = \$147,296,809 (out of 12)
 - Average = \$12,274,734 (including 0's; \$141,000,000 outlier)

Assistance needed for funding other flood risk resilience policies/programs

- The majority of respondents, or 10/14, said their parish needs assistance funding other flood risk reduction and resilience policies and programs
 - 8/10: Hazard mitigation plan
 - 7/10: Capital improvement plan
 - 7/10: Stormwater management
 - 6/10: Comprehensive plan
 - 6/10: Local flood damage prevention policy
 - 6/10: NFIP CRS
 - 6/10: Natural resource and/or open space management

Available/accessible funding streams to support local match for any flood risk reduction-related project types

- Funding streams:
 - 5/17: N/A
 - 5/17: General fund or parish revenue
 - 2/17: CPRA RESTORE Act Matching Program
 - 1/17: Ad Valorem/Special Revenue Fund
 - 1/17: Bond Sale/Capital Project and Debt Service Funds
 - 1/17: CDBG-DR: FEMA PA non-Federal Share Match Program
 - 1/17: Drainage millage
 - 1/17: GOMESA
- Amount of funding available/accessible:
 - 17 respondents; 7 said \$0 or \$1.12
 - Total = \$52,641,508 (out of 17)
 - Average = \$3,096,559 (including the 0's and 1.12)
 - Median = \$1,472,286 (not including the 0's and 1.12)
- Allowable uses of funding:
 - 3/17 respondents: Coastal restoration/protection activities
 - 1/17 respondents: Drainage projects
- Additional notes on this question:
 - 4/7 responses said the funding source originates with the parish itself
 - On average, funding sources are known to be available for 1 year

Anticipated funding streams that may become available over the next several years to support local match for any flood risk reduction-related project types:

- Funding streams:
 - 7/13: N/A
 - 2/13: GOMESA
 - 2/13: Restore Louisiana Homeowner Assistance Program
 - 1/13: General Fund
 - 1/13: HMGP Funding Regional
- Amount of anticipated funding over the next several years:
 - 9 respondents; 5 said \$0
 - Total = \$12,000,025 (out of 9)
 - Average = \$1,000,002 (including 0's)
 - Median = \$5,500,000 (not including the 0's)

2.4 Mitigation History and Education

Respondents were asked about their past mitigation experience in addition to details about existing educational and outreach activities related to current and future flood risk, as well as flood risk reduction policies and projects. Within mitigation history, respondents were asked whether their parish had been subject to any audits or project maintenance issues. Additionally, they were asked whether vulnerable populations and households were considered in past projects.

2.4.1 Education

- 14/15 currently engage in active education or outreach to make people aware of current flood risk as defined by FEMA Flood Insurance Rate Maps
- 4/11 currently engage in active education or outreach to make people aware of current flood risk as defined by the Louisiana Coastal Master Plan
- 3/15 currently engage in active education or outreach to make people aware of expected future flood risk as defined by the Louisiana Coastal Master Plan

2.4.2 Audits

- 7/15 have been subject to a state audit related to any funding for flood risk reduction projects
- 6/15 have been subject to a federal audit related to any funding for flood risk reduction projects
 - Mostly no findings/issues (state/federal)
 - One parish: findings regarded procurement/failure to meet standards not in place at the time of the mitigation activity. Support from state and federal sources regarding procurement are inadequate, so the parish has improved documentation in-house to try to anticipate the future.

2.4.3 Vulnerable Populations

- 7/15 have undertaken some kind of work to assist LMI households in some way other than flood risk reduction
 - 5/7 of those that have have provided financial support
 - Homeless prevention, recovery program, CDBG local match/match availability
 - 3/7 of those that have have provided support programs
 - Entitlement and Community Action; flood insurance for LMI
 - Others (1 each) have provided sandbags during flood events, targeted outreach through letters
- 4/15 have undertaken work to assist other vulnerable populations (e.g., the elderly, minority communities, homeless populations, children, persons with special needs) in some way other than mitigation funding/implementation
 - Mostly through support programs (3/4) – city assisted evacuation; STARC/Coast Transit

- 1 parish: sandbag delivery to the elderly/disabled
- Additional comments from respondents:
 - "Most of our funding is from FEMA, which only has limited assistance for LMI vs. any other applicant"

2.4.4 Project Maintenance

Residential Acquisitions

- 6/14 of parishes have implemented residential acquisition projects over the last 5 years
 - Of those that have, all (6/6) said the properties are presently managed in a manner compatible with maintaining the natural/beneficial functions of the floodplain
 - Of those that haven't, all (8/8) do not have any interest in learning more about the benefits of acquired green space, case studies of successful projects and best practices
 - All of those that haven't (8/8) said maintenance or other tax base implications have led to decisions not to participate in residential acquisitions
 - Additional comments from respondents:
 - "The vast majority remain vacant to this day"
 - "Only a few were redeveloped through a grant program administered by the parish"
 - "Liability"
 - "No dedicated funding source for maintenance"

Non-Residential Floodproofing

- 3/14 have implemented non-residential floodproofing projects over the last 5 years
 - Of those that have, all (3/3) said they consistently ensured that the funding recipients had a regular maintenance and exercise plan in place

Current existing project maintenance programs

- Existing programs:
 - 12/14: Stormwater/drainage maintenance programs
 - 7/14: Canal project maintenance programs
 - 6/14: Levee safety programs
 - 5/14: Flood prevention project maintenance programs

Assistance requested for long-term operations and/or maintenance

- Half of respondents, or 7/14, said their parish does need assistance with long-term operations and/or maintenance of past/present/future acquisition projects
 - 7/7: Funding resources
 - 4/7: Technical support
 - 3/7: Training

- Other:
 - Policy change to put property back into commerce, stipulation that new structures be built to a certain height
 - Allow sale with deed restrictions to allow private maintenance/insurance
- The majority of respondents, or 11/13, said they do need assistance with long-term operations and/or maintenance of current existing project maintenance programs
 - 10/11: Funding resources
 - 6/11: Technical support
 - 4/11: Training
 - 3/11: Staff hiring
 - 3/11: Contract/Consultant Support
 - 3/11: Models and/or Data

2.4.5 Communication Activities

The following table displays survey respondents' answers, in aggregate, regarding:

- Current parish outreach activities to build awareness and understanding about current flood risk, as defined by FEMA
- What respondents believe to be the most effective outreach activities to build awareness and understanding about future flood risk, as defined, for example, by the 2017 Coastal Master Plan
- What respondents believe to be the most effective outreach activities to build awareness and support for flood risk resilience projects
- What respondents believe to be the most effective outreach activities to build awareness and support for flood risk resilience policies

Respondents were asked to select from a variety of options. If they selected a “parent” option, such as “mailings/newsletters,” they were then provided an additional variety of options from which to select to clarify the specifics of the parent activity. For example, if the respondent selected “mailings/newsletters,” they were then asked to specify whether mailings/newsletters are sent or would be effective if sent to repetitive loss areas, local businesses, residents, major employers, and so forth.

Note: italicized fractions are sub-fractions of their respective parent options. They include only those respondents who responded positively to the parent option. The denominators of the fractions in bold indicate the total number of parishes that participated in responding to the given subsection, organized by column. For example, 9/14 respondents indicated that they currently use social media to build awareness on current flood risk. Out of those respondents, 1/9 said they use Twitter for this purpose.

Table 4: Communication Activities

| | CURRENT ACTIVITIES (CURRENT RISK) | MOST EFFECTIVE WAYS (FUTURE RISK) | MOST EFFECTIVE WAYS (PROJECTS) | MOST EFFECTIVE WAYS (POLICIES) |
|----------------------------------|--------------------------------------|---|-----------------------------------|-----------------------------------|
| Website | 8/14 | 12/12 | 8/11 | 7/13 |
| | | | | |
| Social Media | 9/14 | 12/12 | 11/11 | 13/13 |
| Facebook | 9/9 | 12/12 | 3/11 | 12/13 |
| Twitter | 1/9 | 4/12 | 1/11 | 4/13 |
| | | | | |
| Flyers/Brochures | 13/14 | 12/12 | 8/11 | 9/13 |
| Local gov't buildings | 13/13 | 10/12 | 6/8 | 9/9 |
| Library | 8/13 | 8/12 | 5/8 | 6/9 |
| Local businesses | 4/13 | 5/12 | 6/8 | 4/9 |
| Public bulletin boards | 4/13 | 5/12 | 3/8 | 4/9 |
| | | | | |
| Mailings/Newsletters | 10/14 | 12/12 | 11/11 | 8/13 |
| RL areas | 8/10 | 8/12 | 8/11 | 5/8 |
| Local businesses | 6/10 | 7/12 | 6/11 | 6/8 |
| Residents | 7/10 | 9/12 | 9/11 | 7/8 |
| Utilities | 1/10 | 3/12 | 1/11 | 2/8 |
| Major employers | 1/10 | 6/12 | 1/11 | 5/8 |
| Essential facilities | 2/10 | 2/12 | 1/11 | 3/8 |
| Schools: K-12 education | 1/10 | 5/12 | 2/11 | 4/8 |
| Schools: universities | 1/10 | 4/12 | 1/11 | 3/8 |
| | | | | |
| Public Meetings/Workshops | 13/14 | 12/12 | 9/11 | 11/13 |
| Regularly scheduled | 3/13 | 4/12 | 4/9 | 6/11 |
| Intermittent/as needed | 11/13 | 10/12 | 7/9 | 7/11 |
| | | | | |
| Focus Groups | 9/14 | 8/12 | 6/11 | 6/13 |
| Regularly scheduled | 0/9 | 2/8 | 2/6 | 2/6 |
| Intermittent/as needed | 9/9 | 7/8 | 4/6 | 4/6 |
| | | | | |
| Neighborhood/Civic Groups | 13/14 | 10/12 | 9/11 | 9/13 |
| Regularly scheduled | 1/13 | 3/10 | 3/9 | 4/9 |
| Intermittent/as needed | 12/13 | 8/10 | 6/9 | 5/9 |
| | | | | |
| Targeted Outreach | 13/14 | 10/12 | 9/11 | 8/13 |
| RL areas | 10/13 | 8/10 | 7/9 | 5/8 |
| Local businesses | 6/13 | 7/10 | 5/9 | 5/8 |
| Residents | 11/13 | 8/10 | 8/9 | 8/8 |
| Utilities | 1/13 | 1/10 | 1/9 | 3/8 |
| Major employers | 2/13 | 5/10 | 1/9 | 4/8 |
| Essential facilities | 1/13 | 3/10 | 2/9 | 3/8 |
| Schools: K-12 education | 1/13 | 5/10 | 2/9 | 3/8 |
| Schools: universities | 0/13 | 2/10 | 1/9 | 2/8 |

2.5 Flood Damage Prevention Policies and Programs

Survey respondents were asked a series of questions about their parish's existing policies and programs. This section includes aggregate responses on topics ranging from details about parishes' flood damage prevention ordinances, higher standards in the parish, repetitive loss properties, parish plans, and public and political support, enforcement, and incentives. Respondents also indicated what types of assistance or training they might need for effective floodplain management.

2.5.1 Flood Damage Prevention Ordinances

- 12/13 of respondents said they do have a local flood damage prevention ordinance
 - 1/13 were unsure
 - 9/12 provided links
 - Average years old (last updated) = 5 years
- 11/12 of those that said they do have a flood damage prevention ordinance said they feel as though they have what they need to enforce their current ordinance
 - 1/12 said: "Staffing issues due to Parish-wide budget cuts have resulted in limited planning and enforcement"

Development in the Floodplain

- 10/13 said they do currently evaluate the potential impacts of new development or capital improvement projects on the floodplain
 - 3/13: Permitting process
 - 3/13: Drainage studies / impact analysis
 - 1/13: Require post-development runoff = 15% less than pre-development runoff
 - 1/13: Elevation certificates
 - 1/13: Hire contractor to study
- 9/10 of those that said they do evaluate potential impacts retain the results of this evaluation
- 9/13 of parishes' flood damage prevention ordinances do provide restrictions on development in the floodplain

Higher Standards

- 7/13 of parishes' flood damage prevention ordinances do provide freeboard for residential properties
- 4/13 provide standards for flood damage prevention of critical infrastructure
- 7/13 provide on-site stormwater retention standards
- 7/13 provide other higher standards
 - 1/13: Higher X-Zone requirements and enforcement of preliminary D-Firms
 - 1/13: Local drainage protection
 - 1/13: Pre/post-development reduction standards
 - 1/13: Stormwater Drainage Design Manual/some uses not allowed in the floodplain
 - 1/13: Cumulative substantial improvement and compensatory storage

2.5.2 Public and Political Support and Incentives

Support

- 4/13 respondents said that over the past 5 years, their parish has attempted to implement policies/ordinances/programs that would reduce flood risk but were not adopted due to a lack of public and/or political support
 - 2/4: Utility feeds, improvement districts, or other revenue generating source to fund implementation
 - 2/4: Zoning and land use regulations
 - 1/4: Higher than NFIP-minimum ordinance standards (e.g., freeboard)
 - 1/4: Parish Comprehensive Master Plan
 - 1/4: Drainage millage
- 7/13 said there is support by parish staff to re-evaluate existing and/or advance the development of new policies/ordinances that reduce flood risk
 - Of those that said there isn't, 4/6 said their parish has provided a forum for education/discussion to foster that support (with both the public and elected officials)

Enforcement

- 3/13 said their parish's staff have faced challenges enforcing flood damage prevention development standards (e.g., project or new construction planning and design phase)
 - Objections to permitting process, political/community resistance
 - 10/13 said their parish's staff haven't faced such challenges
- 6/13 said their parish's staff have faced challenges enforcing flood damage prevention code enforcement (e.g., difficulty remediating unpermitted or noncompliant activity)
 - Difficult to monitor all construction; noncompliance
 - 7/13 said their parish's staff haven't faced such challenges
- 2/13 said their parish's staff have faced challenges enforcing substantial damage or substantial improvement requirements (e.g., structure renovation planning)
 - 11/13 said their parish's staff haven't faced such challenges
- 0/13 said their parish's staff have faced challenges enforcing other flood damage prevention policies
 - 13/13 said their parish's staff haven't faced such challenges

Incentives

- Programs being used at the parish level to encourage flood risk reduction by private property owners and/or developers at the site-specific scale:
 - 8/10: N/A
 - 2/10: Cost-share programs

2.5.3 Implementation of Standards

- 12/13 respondents said their parish has not implemented building 2-feet above the 100-year FEMA BFE for most projects

Repetitive Loss Properties

- 11/12 said their parish does maintain a list of repetitive loss properties in their parish
- Activities undertaken related to these properties:
 - 9/11: Elevation
 - 8/11: Drainage improvements
 - 7/11: Acquisition
 - 7/11: Targeted outreach
 - 6/11: Levees or floodwalls
 - 1/11: Mitigation reconstruction (write-in)
- 6/11 said RL properties have not affected planned future development in their parish. 2/11 said they have, 3/11 are unsure
- 4/11 said RL properties have not affected property values in their parish. 2/11 say they have, 5/11 are unsure

2.5.4 Assistance

Resources needed for effective floodplain management

- 9/13: Funding resources
 - Funding to assist with CRS Repetitive Loss Area Analysis/Floodplain Management Plan development
 - Elevation grants
- 8/13: Technical expertise
- 5/13: Models and/or data
 - 1x 500-year flood elevations, post-WSLP levee BFE projections, insurance cost projections
 - 1x Base level engineering for A zones
 - 1x Structural data outside coastal model
- 5/13: Floodplain management expertise
- Other:
 - Ongoing training and onsite assistance

Types of support to assist the parish with improving flood risk reduction related programs

- 11/13: Funding resources
- 8/13: Technical expertise
- 6/13: Master Plan expertise
- 5/13: Construction management expertise

Types of support to assist with improving enforcement of flood risk reduction related policies

- 11/13: Funding resources
- 7/13: Technical expertise
- 6/13: Staff resources
- 5/13: Engineering design expertise
- 5/13: Construction management expertise
- Other:
 - Outreach about the importance of flood safety/valuation
 - State or regional hazard mitigation projects
- Explanations:
 - Budget constraints: can't increase the number of inspectors required to cover a large parish
 - Many unnumbered A zones, sometimes pose a challenge for determining the BFE

Types of support to assist with encouraging property owners/developers to implement site-specific flood risk reduction measures

- 8/13: Funding resources
- 6/13: Technical expertise
- 6/13: Construction management expertise
- 5/13: Project management expertise

2.5.5 Parish Plans

For this section, respondents were asked a series of questions each about their parish's comprehensive plan, floodplain management plan, FEMA-approved hazard mitigation plan, and local coastal zone management plan. The following table provides a cross-comparison of aggregate responses for each plan type. Notably, most parishes have adopted these plan types, with the exception of floodplain management plans. However, most plans do not yet address climate change-related hazards or consider projections of future climate and weather pattern changes, nor do they account for uncertainties about future conditions. Further, they are not very often integrated into other plans, whether state-level (with the exception of hazard mitigation plan), regional, other parish plans, or municipal.

Note: "vertical integration" is understood as integration with the State's Hazard Mitigation Plan, CPRA's Master Plan, or federal policies aimed to reduce flood risk. "Horizontal integration" refers to active alignment with other plans within the parish.

Key:

- Degree to which future expected flood risk is addressed in plan:
 - 0% - Future expected flood risk is not addressed
 - 33.3% - Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed
 - 66.7% - Future expected flood risk is clearly defined, but not integrated into planning
 - 100% - Future expected flood risk is integrated into planning

Table 5: Parish Plans

| | PARISH COMPREHENSIVE PLAN | PARISH FLOODPLAIN MANAGEMENT PLAN | FEMA APPROVED PARISH HAZARD MITIGATION PLAN | LOCAL COASTAL ZONE MANAGEMENT PLAN |
|--|------------------------------|--------------------------------------|---|---------------------------------------|
| How many have adopted? | | | | |
| Yes | 10/14 | 6/13 | 12/13 | 9/13 |
| In Progress | 1/14 | 3/13 | 0/13 | 0/13 |
| No | 3/14 | 4/13 | 1/13 | 4/13 |
| How many provided links | | | | |
| | 7/10 | 4/6 | 5/12 | 5/9 |
| Last updated? (Avg years old) | | | | |
| | 6.3 (out of 7 parishes) | 3.0 (out of 5 parishes) | 2.3 (out of 9 parishes) | 16.8 (out of 8 parishes) |
| What sources of flood are addressed? | | | | |
| Coastal | 5/9 | 8/9 | 9/11 | 6/8 |
| Riverine | 2/9 | 4/9 | 9/11 | 3/8 |
| Stormwater | 6/9 | 8/9 | 10/11 | 4/8 |
| Flooding not addressed | 3/9 | 1/9 | 0/11 | 1/8 |
| Degree to which future expected flood risk is addressed in the plan (see key) | | | | |
| | 66.7% (out of 8 parishes) | 55.5% (out of 9 parishes) | 66.7% (out of 11 parishes) | 50% (out of 8 parishes) |
| What projections are considered? | | | | |
| Population changes | 8/9 | 3/8 | 7/10 | 4/7 |
| Development patterns / changes to built environment | 6/9 | 5/8 | 7/10 | 5/7 |
| Changes to natural environment | 5/9 | 4/8 | 6/10 | 5/7 |
| Climate and weather pattern changes | 3/9 | 0/8 | 6/10 | 3/7 |
| Address climate change related hazards? | | | | |
| Yes | 3/8 | 1/8 | 5/10 | 2/7 |
| In Progress | 0/8 | 0/8 | 2/10 | 0/7 |
| No | 5/8 | 7/8 | 3/10 | 5/7 |
| What data sources are used to address climate change-related hazards? | | | | |
| CPRA | 3/8 | 2/7 | 4/10 | 4/8 |
| NOAA | 6/8 | 5/7 | 8/10 | 6/8 |
| USGCRP | 3/8 | 2/7 | 4/10 | 2/8 |
| USGS | 0/8 | 0/7 | 1/10 | 0/8 |
| None/Seeking | 3/8 | 2/7 | 2/10 | 2/8 |
| Does the plan guide land use development? | | | | |
| Yes | 7/9 | 4/8 | 3/10 | 5/7 |
| No | 2/9 | 4/8 | 7/10 | 2/7 |
| Does the plan guide flood risk reduction project activity? | | | | |
| Yes | 3/9 | 4/8 | 6/10 | 2/6 |
| In Progress | 1/9 | 1/8 | 2/10 | 0/6 |
| No | 5/9 | 3/8 | 2/10 | 4/6 |
| Identify specific mitigation projects? | | | | |
| Yes | 4/9 | 3/7 | 8/10 | 2/7 |
| In Progress | 0/9 | 1/7 | 0/10 | 0/7 |
| No | 5/9 | 3/7 | 2/10 | 5/7 |
| Assess how other plans complement this plan? | | | | |
| Yes | 5/8 | 1/6 | 5/10 | 1/5 |

| | PARISH COMPREHENSIVE PLAN | PARISH FLOODPLAIN MANAGEMENT PLAN | FEMA APPROVED PARISH HAZARD MITIGATION PLAN | LOCAL COASTAL ZONE MANAGEMENT PLAN |
|---|------------------------------|--------------------------------------|---|---------------------------------------|
| <i>In Progress</i> | 0/8 | 0/6 | 1/10 | 0/5 |
| <i>No</i> | 3/8 | 5/6 | 4/10 | 4/5 |
| | | | | |
| Vertically integrated? | | | | |
| <i>Yes</i> | 1/8 | 3/7 | 7/10 | 2/6 |
| <i>In Progress</i> | 2/8 | 1/7 | 1/10 | 0/6 |
| <i>No</i> | 5/8 | 3/7 | 2/10 | 4/6 |
| | | | | |
| Horizontally integrated? | | | | |
| <i>Hazard mitigation plan</i> | 3/8 | 5/7 | | 1/6 |
| <i>Capital improvement plan</i> | 5/8 | 2/7 | 4/9 | 1/6 |
| <i>Natural resource management plan</i> | 2/8 | 2/7 | 1/9 | 1/6 |
| <i>Floodplain management plan</i> | 2/8 | | 6/9 | 2/6 |
| <i>Local coastal zone management plan</i> | 3/8 | 3/7 | 3/9 | |
| <i>Comprehensive plan (write-in)</i> | | 0/7 | 3/9 | 1/6 |
| | | | | |
| Regional/cross-parish integration | | | | |
| <i>Yes</i> | 2/9 | 1/8 | 1/9 | 2/7 |
| <i>In Progress</i> | 0/9 | 1/8 | 0/9 | 0/7 |
| <i>No</i> | 7/9 | 6/8 | 8/9 | 5/7 |
| | | | | |
| Mechanism in place to ensure alignment with municipal plans? | | | | |
| <i>Yes</i> | 3/9 | 1/8 | 4/10 | 1/7 |
| <i>In Progress</i> | 0/9 | 2/8 | 2/10 | 0/7 |
| <i>No</i> | 6/9 | 5/8 | 4/10 | 6/7 |
| | | | | |
| Address land use planning/zoning as risk reduction measure? | | | | |
| <i>Not addressed</i> | 3/8 | 3/7 | 3/9 | 3/6 |
| <i>Mentioned, no actions assigned</i> | 0/8 | 4/7 | 4/9 | 1/6 |
| <i>Described in detail, no actions assigned</i> | 1/8 | 0/7 | 0/9 | 1/6 |
| <i>Specific actions assigned</i> | 4/8 | 0/7 | 2/9 | 1/6 |
| | | | | |
| Account for uncertainties about future conditions? | | | | |
| <i>Yes</i> | 3/9 | 0/8 | 3/10 | 3/7 |
| <i>In Progress</i> | 0/9 | 2/8 | 2/10 | 0/7 |
| <i>No</i> | 6/9 | 6/8 | 5/10 | 4/7 |

2.6 External Relations

In this section, survey respondents were asked to provide an overview of how their parish coordinates and collaborates with other parishes, municipalities, academic and research institutes, and regional entities for flood risk mitigation and related planning and policy.

2.6.1 Providing and Receiving Support

Respondents were asked about their relationships with other parishes, with their municipalities, and with regional organizations. In addition to being asked to indicate whether their parish coordinates closely with these other external parties, respondents also indicated whether they:

- Currently provide specific types of support to other parishes, municipalities, or regional organizations
- Currently receive specific types of support from other parishes, municipalities, or regional organizations
- Are willing to provide specific types of support to other parishes, municipalities, or regional organizations
- Are willing to receive specific types of support from other parishes, municipalities, or regional organizations.

Specific types of support included things like staff resources, funding and financing, and outreach and engagement support. Table 6, below, displays the aggregate responses on each of these questions. The numbers indicate how many parishes responded “Yes” to each question. Of particular note is that most parishes are both willing to receive and to provide outreach and engagement support from all of these external parties.

Relationship with other parishes

- 6/15 said their parish coordinates closely with other parishes on flood risk reduction and related planning and policy. Examples from respondents include:
 - Attempted a CRS User Group
 - Sharing of ideas, template documents, assistance with CFM duties
 - Open communications on projects that could potentially affect others
 - Outreach events/materials for CRS
- Additional comments from respondents:
 - “Most of these interactions are informal questions between peers. Various staff members provide training and peer support when approached by other public servants, generally. We would like funding from parishes to offset some lower regulations in stormwater management that create issues on our parish line. We talk with other parishes, but don’t necessarily take the same directions.”

Relationship with municipalities

- 6/10 said their parish coordinates closely with municipalities within their parish. Examples from respondents include:
 - Hazard Mitigation Planning, CRS User Group, Ordinance, Grant Applications
 - Informal coordination

Relationship with regional organizations

- 6/15 said their parish participates in regional planning coordination related to floodplain or watershed management or flood damage prevention. Examples from respondents include:
 - Working toward preparing a regional watershed study
 - Acadiana Planning Commission (Acadia, Iberia, Lafayette, St. Martin, Vermilion; adjacent to St. Mary)

Table 6: Providing and Receiving Support

| | Staff Resources | Construction Management Expertise | Funding and Financing | Floodplain Management | Outreach and Engagement | Engineering Design Expertise | Project Management Expertise |
|-------------------------------|-----------------|-----------------------------------|-----------------------|-----------------------|-------------------------|------------------------------|------------------------------|
| OTHER PARISHES | | | | | | | |
| <i>Provide support to?</i> | 4/15 | 2/15 | 2/15 | 4/15 | 4/15 | 2/15 | 3/15 |
| <i>Receive support from?</i> | 4/15 | 1/14 | 1/15 | 4/15 | 6/14 | 3/14 | 2/14 |
| <i>Willing to provide?</i> | 7/15 | 7/15 | 3/15 | 9/15 | 10/15 | 7/15 | 8/15 |
| <i>Willing to receive?</i> | 6/15 | 5/14 | 8/15 | 8/15 | 10/15 | 6/15 | 8/15 |
| | | | | | | | |
| MUNICIPALITIES | | | | | | | |
| <i>Provide support to?</i> | 6/11 | 4/10 | 6/10 | 5/10 | 5/10 | 5/10 | 5/10 |
| <i>Receive support from?</i> | 3/10 | 1/10 | 1/10 | 2/10 | 3/10 | 1/10 | 1/10 |
| <i>Willing to provide?</i> | 7/10 | 6/9 | 6/9 | 7/10 | 7/10 | 6/9 | 6/9 |
| <i>Willing to receive?</i> | 5/10 | 3/10 | 4/10 | 5/10 | 6/10 | 3/10 | 3/10 |
| | | | | | | | |
| REGIONAL ORGANIZATIONS | | | | | | | |
| <i>Provide support to?</i> | 5/15 | 2/14 | 5/15 | 4/15 | 5/15 | 2/14 | 2/15 |
| <i>Receive support from?</i> | 7/15 | 2/15 | 5/15 | 3/15 | 7/15 | 1/14 | 3/15 |
| <i>Willing to provide?</i> | 7/14 | 7/14 | 8/14 | 8/14 | 10/14 | 6/13 | 7/14 |
| <i>Willing to receive?</i> | 11/15 | 10/15 | 12/15 | 11/15 | 12/15 | 9/14 | 10/15 |

2.6.2 Academic and Research Institutes

- 6/15 use academic and/or research institute partnerships to assist with planning and mitigation activities
 - 4/6: UNO
 - 2/6: LA Sea Grant
 - 2/6: LSU Ag Center
 - 1/6: Coastal Sustainability Studio
 - 1/6: Lake Pontchartrain Basin Foundation
 - 1/6: NIMSAT
 - 1/6: SDMI
 - 1/6: Tulane University
 - 1/6: UL Lafayette
 - 1/6: The Water Institute of the Gulf
- Types of partnerships:
 - 6/6: Technical expertise
 - 4/6: Research project/study
 - 3/6: Developing local plans or designs
 - 1/6: Internship positions
 - 1/6: Mapping accessibility (write-in)
- 11/15 would like to develop additional partnerships. Examples provided by respondents:
 - Technical expertise in water sciences, hydrology, engineering
 - Databases, storm/flood modeling, future risk projection, research

2.6.3 Extent of Coordination

To what degree does external coordination meet the parish's flood risk reduction-related needs?

- 11/15: Some coordination that partially meets parish needs
 - Only 1 parish said coordination entirely meets or exceeds the parish's current and expected future needs
 - 3 parishes said no coordination at this time/needs not met

2.7 Data Gathering and Maintenance

In the final section of the survey, each respondent had the opportunity to provide specifics on existing data in their parish as well as their processes of and systems for gathering, maintaining, and updating data important to flood risk and resilience programs in their parish. As in the previous sections, they were also provided the opportunity to specify types of assistance they felt their parish needs with regard to data gathering and maintenance.

2.7.1 Geographic Information Systems (GIS)

- 10/16 survey respondents said their parish has a GIS department in place
- Of those that don't:
 - 5/6 said that parish staff are not capable of providing GIS assistance
 - Only 2/6 said that their parish engages in external coordination that provides GIS assistance
- Of those that do:
 - Parishes have an average of 4 staff members in their GIS department
 - ArcGIS is the most popular software
 - 7/10 respondents said their parish's GIS system serves as a repository for flood map data
 - 2 of the respondents that said their parish doesn't keep flood map data on their GIS servers referred to LSU Ag Center as a third-party site for this information
 - 4/10 could provide links to their parish's GIS information
 - 8/10 said that their parish GIS system allows members of the public to see their flood risk, although 1 respondent could not provide a link to this information

2.7.2 Light Detection and Ranging (LiDAR)

- 5/16 respondents said their parish does not utilize any LiDAR data; 4/16 said their parish performs their own LiDAR surveys; 4/16 said their parish uses USGS LiDAR data; 3/16 said their parish uses other publicly available LiDAR data
- Most of the respondents, or 7/9, said that the quality of their parish's existing LiDAR data is QL2
- 7/11 said their parish's existing LiDAR data covers the entire parish
- Average vertical accuracy (out of 5 parishes) = 0.16m
- Average horizontal resolution (out of 6 parishes) = 0.62m
- Average years old (data was collected/processed) (out of 5 parishes) = 1.8 years
 - 4/9 did not know when LiDAR was last collected

2.7.3 Hydrologic Data

Waterbody Flow/Stage/Pool Level Data

- Only a small minority of respondents, or 2/16, said that their parish archives waterbody flow, stage, or pool level data other than those publicly available from USGS, NOAA, USACE, or CRMS stations
 - 1 parish archives stream gauge data during major rain events/storms

RiverCams, High Water Marks, Gauges

- Only 2/15 said their parish maintains RiverCams to photograph conditions in rivers/streams/canals
- 7/15 said their parish collects and/or cooperates with their regional USGS office to document and survey high water marks during and/or following flood events
- 7/15 said their parish has entities (e.g., levee boards, river commissions) that could assist with data collection, operation, and maintenance of gauges
 - 4/7: Levee districts or levee authorities
 - 1/7: Drainage districts

2.7.4 Hydraulic Structures

- 12/16 respondents said their parish does operate hydraulic structures, including stormwater pump stations, flood gates, or spillways
 - Are there documented operating, maintenance, and inspection plans?
 - 5/11 said their parish has documented operating, maintenance, and inspection plans for all (or almost all) structures
 - 4/11 said their parish has plans for major, but not all, structures
 - 2/11 said their parish doesn't have such plans
 - Are operational data at hydraulic structures (e.g., inflows, outflows, and/or elevations/stages) collected and archived?
 - 3/11 said their parish collects/archives for all (or almost all) structures
 - 4/11 said their parish collects/archives for major, but not all, structures
 - 4/11 said their parish doesn't collect/archive operational data
 - Are as-built drawings and updated surveys of hydraulic structures maintained?
 - 4/11 said their parish maintains for all (or almost all) structures
 - 5/11 said their parish maintains for major, but not all, structures
 - 2/11 said their parish doesn't maintain

2.7.5 FEMA Maps and Floodplain Studies

- 9/16 respondents said their parish keeps Flood Insurance Studies and supporting field surveys, hydrology and hydraulic studies, and mapping themselves
 - Of those that said their parish does not, 5/7 said their parish relies on FEMA to keep this data, 1/7 said their parish relies on an engineering firm, and 1/7 said they do not know
- Average years old of last FIRM update = 7.8 years
- The minority, or 6/16, said they believe their parish's FIRM is accurate
 - Additional comments from respondents:
 - "Some areas in question regarding existing flood control structures on landward side not being included in modelling/analysis"
 - "The Parish is currently appealing the preliminary flood maps"
 - "The FIRMs were provided in 2008 and we were not satisfied, appealed, and are in the LAMP process at this time. The regulatory standard is the ABFEs, but the insurance standard is 2006."
- Only half, or 8/16, said they believe there is sufficient data available for their parish's FIRMs
- The majority, or 14/16, said their parish does have the information it needs to effectively understand FIRMs

- 9/16 said their parish does have the information it needs to effectively understand future coastal flood risk as defined by the Coastal Master Plan
 - Additional comments from respondents:
 - "We do not have personnel to monitor this information"
 - "Not familiar with the Coastal Master Plan"
 - "Insufficient data"

Other Studies

- 5/6 respondents said that the information from other floodplain-related studies/modeling that have been completed over the last 5 years are not accessible

2.7.6 Capacities and Capabilities

Key:

- 0% - Data does not meet current needs
- 33.3% - Partially meets current needs
- 66.7% - Entirely meets or exceeds the parish's current needs, but not expected future needs (3-5 years)
- 100% - Entirely meets or exceeds the parish's current and expected future needs (3-5 years)

Average existing IT capabilities/capacity for data collection, management, and maintenance needs = 50% (out of 16 respondents)

- Additional comments from respondents:
 - "Several vacant positions that are not being filled due to financial issues"
 - "Would like to have GIS but don't have computer capabilities at this time"
 - "Drastic budget cuts over past 2-4 years"
 - "Insufficient data"
 - "Staff and resources are minimal... though staff is excellent"

Average capacity to maintain and make readily available NFIP-related studies, maps, and other information = 54% (out of 16 respondents)

Average capacity to maintain and make readily available CRS Credit documentation = 48% (out of 16 respondents)

- Additional comments from respondents:
 - "Began this process in 2014 but ran into roadblocks that disincentivizes the parish to participate in the program"
 - "Multidepartment effort to track/report CRS credit documentation"

2.7.7 Assistance Needed

Assistance needed related to data gathering and maintenance

- 14/16: Funding Resources
- 11/16: Technical Expertise
- 10/16: Data Management Expertise
- 8/16: Staff Resources
- 7/16: Data Storage
- 7/16: Data Analysis Expertise

- 7/16: Data Gathering Expertise

Ideal features of a state or regional website/IT system that would support the implementation of nonstructural mitigation projects, floodplain management, or participation in the CRS rating system

- 14/16: Data portal/data library
- 14/16: Funding information/links to sources
- 13/16: Mapping tools
- 13/16: Flood risk engagement and communication materials
- 12/16: Training materials and curricula
- 12/16: Grant management portal
- 12/16: Joint funding application portal for multiple sources based on project needs
- 11/16: Library for best practices
- 11/16: Online decision tools
- 11/16: State/regional engagement calendar
- 10/16: Links to related websites and resources

Additional suggestions from respondents on ways in which the state can help

- "Creating an app"
- "Help with obtaining permits for drainage maintenance/ streamline this process"
- "Sharing imagery and LiDAR data"
- "State GIS clearinghouse"

2.7.8 Parish Data Collection Table

The following table provides a comprehensive overview of collection, storage, formats, maintenance, coverage, issues, and assistance needed for a multitude of data types, aggregated across parishes. Data types are organized by column and presented in descending order of number of parishes collecting.

Key:

- Data collection intervals:
 - 0% - Data is not collected on a recurring basis
 - 20% - 5-10 years
 - 40% - 2-5 years
 - 60% - Annually
 - 80% - Semi-annually
 - 100% - Monthly

Table 7: Parish Data Collection

| | Elevation certificates | Aerial photographs and imagery | Inventory of pump stations | Future planned land use | Inventory of canals | Repetitive loss properties | Existing conditions land use and/or landcover | Floodplain delineation | Inventory of levees | Built asset inventory | ABFE maps/data | Historical flood losses | Finished floor surveys | Inventory of floodgates |
|---|--|--------------------------------------|-------------------------------|----------------------------|------------------------|-------------------------------|---|---------------------------|------------------------|---------------------------------|---------------------------|----------------------------|---|----------------------------|
| MAJORITY OF PARISHES DO COLLECT | | | | | | | | | | | | | | |
| MAJORITY OF PARISHES DON'T COLLECT | | | | | | | | | | | | | | |
| How many parishes do collect | | | | | | | | | | | | | | |
| | 13/15 | 12/15 | 10/14 | 10/15 | 10/15 | 10/15 | 9/15 | 9/15 | 9/15 | 9/15 | 9/15 | 8/14 | 8/14 | 8/15 |
| | | | | | | | | | | | | | | |
| Storage | | | | | | | | | | | | | | |
| Parish/Municipal Server | 10/13 | 10/13 | 8/12 | 9/12 | 10/12 | 6/11 | 9/12 | 7/13 | 7/11 | 8/11 | 7/12 | 7/12 | 6/10 | 6/11 |
| Online/Cloud Service | 0/13 | 4/13 | 0/12 | 1/12 | 0/12 | 1/11 | 1/12 | 2/13 | 0/11 | 0/11 | 0/12 | 1/12 | 0/10 | 0/11 |
| External Hard Drive | 0/13 | 1/13 | 0/12 | 0/12 | 0/12 | 0/11 | 0/12 | 0/13 | 0/11 | 0/11 | 0/12 | 0/12 | 0/10 | 0/11 |
| LSU AgCenter | 0/13 | 0/13 | 0/12 | 0/12 | 0/12 | 0/11 | 0/12 | 0/13 | 0/11 | 0/11 | 1/12 | 0/12 | 0/10 | 0/11 |
| | | | | | | | | | | | | | | |
| Data format | | | | | | | | | | | | | | |
| Shapefile/ArcGIS | 1/13 | 8/12 | 8/12 | 6/10 | 8/12 | 2/11 | 7/11 | 6/11 | 7/11 | 6/11 | 5/12 | 2/10 | 0/9 | 5/10 |
| AutoCAD DWG | 1/13 | 0/12 | 2/12 | 0/10 | 2/12 | 0/11 | 0/11 | 0/11 | 2/11 | 0/11 | 1/12 | 0/10 | 1/9 | 2/10 |
| PDF/Non-Georeferenced | 5/13 | 4/12 | 2/12 | 1/10 | 3/12 | 1/11 | 0/11 | 0/11 | 2/11 | 0/11 | 2/12 | 0/10 | 3/9 | 2/10 |
| Excel/CSV | 7/13 | 1/12 | 3/12 | 1/10 | 3/12 | 7/11 | 1/11 | 2/11 | 2/11 | 3/11 | 3/12 | 6/10 | 2/9 | 2/10 |
| | | | | | | | | | | | | | | |
| Metadata availability | | | | | | | | | | | | | | |
| | 1/5 | 3/7 | 3/7 | 1/7 | 3/7 | 1/5 | 2/7 | 2/6 | 3/7 | 1/6 | 1/5 | 2/6 | 1/5 | 3/8 |
| | | | | | | | | | | | | | | |
| How old is the data? (average years based on dates of last update) | | | | | | | | | | | | | | |
| | 0.2 | 1.4 | 1.4 | 3.8 | 1.3 | 0.8 | 2.25 | 5.4 | 0.8 | 1.2 | 3 | 1.4 | 0.25 | 0.4 |
| | | | | | | | | | | | | | | |
| Data collection frequency (see key) | | | | | | | | | | | | | | |
| | 66% (and as needed/continually/upon application) | 25% | 33% | 18% | 20% (and as built) | 27% (provided by FEMA) | 22% | 3% (and provided by FEMA) | 40% | 34% (and as new assets come in) | 3% (and provided by FEMA) | 13% | 29% (and continually/up on application) | 40% |
| | | | | | | | | | | | | | | |
| Public availability | | | | | | | | | | | | | | |
| | 3/9 | 5/9 | 3/7 | 5/8 | 2/7 | 2/10 | 4/8 | 5/8 | 4/7 | 3/8 | 6/7 | 3/9 | 2/8 | 4/7 |
| | | | | | | | | | | | | | | |
| How many have a maintenance/update plan | | | | | | | | | | | | | | |
| | 4/8 | 2/8 | 4/7 | 2/8 | 3/7 | 2/9 | 2/8 | 2/8 | 4/7 | 3/8 | 2/7 | 2/8 | 3/8 | 4/7 |
| | | | | | | | | | | | | | | |
| Location/coverage | | | | | | | | | | | | | | |
| Entire parish | 9/12 | 10/13 | 9/12 | 7/12 | 6/12 | 11/13 | 7/12 | 7/11 | 7/12 | 7/11 | 10/12 | 9/12 | 6/11 | 5/11 |
| Specific cities/neighborhoods | 1/12 | 1/13 | 0/12 | 0/12 | 0/12 | 0/13 | 0/12 | 0/11 | 0/12 | 0/11 | 0/12 | 0/12 | 0/11 | 0/11 |
| Specific natural features | 0/12 | 1/13 | 0/12 | 0/12 | 1/12 | 0/13 | 0/12 | 0/11 | 0/12 | 0/11 | 0/12 | 0/12 | 0/11 | 1/11 |
| | | | | | | | | | | | | | | |
| Known issues with data | | | | | | | | | | | | | | |
| Incomplete dataset | 0/9 | 2/10 | 0/7 | 1/7 | 1/7 | 2/9 | 1/7 | 1/7 | 1/7 | 2/10 | 1/9 | 2/8 | 0/8 | 1/6 |
| Out-of-date | 0/9 | 1/10 | 0/7 | 0/7 | 0/7 | 1/9 | 0/7 | 0/7 | 0/7 | 1/10 | 0/9 | 0/8 | 0/8 | 0/6 |
| Quality control issues | 0/9 | 0/10 | 0/7 | 0/7 | 0/7 | 1/9 | 0/7 | 0/7 | 0/7 | 0/10 | 1/9 | 1/8 | 0/8 | 0/6 |
| | | | | | | | | | | | | | | |
| Need technical assistance to obtain or manage? (10/16 say they need help) | | | | | | | | | | | | | | |
| | 5/10 | 7/10 | 6/10 | 6/10 | 8/10 | 6/10 | 6/10 | 6/10 | 7/10 | 6/10 | 5/10 | 8/10 | 6/10 | 7/10 |
| | | | | | | | | | | | | | | |
| Need financial assistance to obtain or manage? (14/16 say they need help) | | | | | | | | | | | | | | |
| | 5/13 | 9/13 | 6/13 | 7/13 | 7/13 | 6/13 | 7/13 | 5/13 | 6/13 | 7/13 | 5/13 | 7/13 | 6/13 | 6/13 |

| | Flood complaint logs | Flood loss and impacts by address | Floodway delineation | Contour layers | Inventory of detention facilities and impoundments | Precipitation data | Hydrologic soils | Duration of flooding | Areas of Environmental Concern (AECs) in the coastal zone | Depth of flooding | Environmentally sensitive areas | Temperature data | Impervious surface inventory | Inventory of dams | Streamflow data |
|---|-----------------------|---|----------------------|----------------|--|--------------------|------------------|----------------------------|---|----------------------------|---------------------------------|------------------|------------------------------|-------------------|-----------------|
| MAJORITY OF PARISHES DO COLLECT | | | | | | | | | | | | | | | |
| MAJORITY OF PARISHES DON'T COLLECT | | | | | | | | | | | | | | | |
| How many parishes do collect | | | | | | | | | | | | | | | |
| | 7/15 | 7/15 | 6/14 | 5/14 | 5/15 | 5/15 | 4/14 | 4/14 | 3/13 | 3/14 | 3/15 | 2/13 | 2/14 | 1/13 | 1/13 |
| Storage | | | | | | | | | | | | | | | |
| Parish/Municipal Server | 4/8 | 5/9 | 5/12 | 4/10 | 4/8 | 3/8 | 4/10 | 3/6 | 2/8 | 3/7 | 2/7 | 1/6 | 1/6 | 1/8 | 1/5 |
| Online/Cloud Service | 2/8 | 3/9 | 2/12 | 2/10 | 0/8 | 1/8 | 1/10 | 0/6 | 2/8 | 0/7 | 2/7 | 1/6 | 1/6 | 0/8 | 0/5 |
| External Hard Drive | 0/8 | 0/9 | 0/12 | 0/10 | 0/8 | 0/8 | 0/10 | 0/6 | 0/8 | 0/7 | 0/7 | 0/6 | 0/6 | 0/8 | 0/5 |
| LSU AgCenter | 0/8 | 0/9 | 0/12 | 0/10 | 0/8 | 0/8 | 0/10 | 0/6 | 0/8 | 0/7 | 0/7 | 0/6 | 0/6 | 0/8 | 0/5 |
| Data format | | | | | | | | | | | | | | | |
| Shapefile/ArcGIS | 1/8 | 2/9 | 3/10 | 4/9 | 4/7 | 0/8 | 3/10 | 0/6 | 2/7 | 1/6 | 2/6 | 0/6 | 1/6 | 1/7 | 0/6 |
| AutoCAD DWG | 0/8 | 0/9 | 0/10 | 0/9 | 1/7 | 0/8 | 0/10 | 0/6 | 0/7 | 0/6 | 0/6 | 0/6 | 1/6 | 0/7 | 0/6 |
| PDF/Non-Georeferenced | 2/8 | 1/9 | 2/10 | 0/9 | 1/7 | 1/8 | 2/10 | 1/6 | 0/7 | 0/6 | 0/6 | 1/6 | 0/6 | 0/7 | 1/6 |
| Excel/CSV | 6/8 | 5/9 | 2/10 | 0/9 | 0/7 | 4/8 | 2/10 | 3/6 | 1/7 | 3/6 | 0/6 | 2/6 | 0/6 | 0/7 | 1/6 |
| Metadata availability | | | | | | | | | | | | | | | |
| | 1/5 | 1/6 | 0/5 | 2/7 | 1/5 | 1/5 | 2/7 | 0/5 | 1/5 | 0/5 | 1/5 | 1/5 | 1/5 | 0/5 | 0/5 |
| How old is the data? (average years based on dates of last update) | | | | | | | | | | | | | | | |
| | 0.6 | 0.6 | 6.25 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Data collection frequency (see key) | | | | | | | | | | | | | | | |
| | 60% (and as reported) | 20% (and as reported; provided by FEMA) | 3% | 5% | 14% | 29% | 0% | 17% (and provided by FEMA) | 0% | 20% (and provided by FEMA) | 3% | 29% | 14% (and as needed) | 0% | 17% |
| Public availability | | | | | | | | | | | | | | | |
| | 1/7 | 2/7 | 4/7 | 2/7 | 1/6 | 3/7 | 1/7 | 2/6 | 3/7 | 2/6 | 3/6 | 3/7 | 1/7 | 1/5 | 2/6 |
| How many have a maintenance/update plan | | | | | | | | | | | | | | | |
| | 2/8 | 1/7 | 1/7 | 0/8 | 2/6 | 2/7 | 0/8 | 1/6 | 1/7 | 1/6 | 1/6 | 1/7 | 2/7 | 1/6 | 0/6 |
| Location/coverage | | | | | | | | | | | | | | | |
| Entire parish | 7/12 | 9/12 | 6/11 | 6/12 | 3/10 | 4/10 | 5/12 | 3/10 | 3/11 | 3/10 | 3/10 | 2/9 | 2/10 | 2/9 | 3/10 |
| Specific cities/neighborhoods | 1/12 | 0/12 | 0/11 | 0/12 | 1/10 | 0/10 | 0/12 | 1/10 | 0/11 | 1/10 | 0/10 | 0/9 | 1/10 | 0/9 | 0/10 |
| Specific natural features | 0/12 | 1/12 | 1/11 | 0/12 | 0/10 | 0/10 | 0/12 | 0/10 | 0/11 | 0/10 | 1/10 | 0/9 | 0/10 | 0/9 | 0/10 |
| Known issues with data | | | | | | | | | | | | | | | |
| Incomplete dataset | 2/8 | 2/8 | 1/7 | 2/9 | 1/6 | 2/6 | 3/9 | 1/7 | 2/8 | 1/7 | 1/7 | 2/6 | 2/8 | 1/6 | 1/6 |
| Out-of-date | 0/8 | 0/8 | 0/7 | 0/9 | 0/6 | 0/6 | 0/9 | 1/7 | 0/8 | 1/7 | 0/7 | 0/6 | 0/8 | 0/6 | 0/6 |
| Quality control issues | 1/8 | 1/8 | 0/7 | 0/9 | 0/6 | 0/6 | 0/9 | 0/7 | 0/8 | 0/7 | 2/7 | 0/6 | 0/8 | 0/6 | 0/6 |
| Need technical assistance to obtain or manage? (10/16 say they need help) | | | | | | | | | | | | | | | |
| | 6/10 | 7/10 | 5/10 | 6/10 | 7/10 | 7/10 | 7/10 | 8/10 | 7/10 | 8/10 | 7/10 | 6/10 | 8/10 | 4/10 | 7/10 |
| Need financial assistance to obtain or manage? (14/16 say they need help) | | | | | | | | | | | | | | | |
| | 7/13 | 9/13 | 5/13 | 9/13 | 7/13 | 9/13 | 8/13 | 10/13 | 6/13 | 10/13 | 7/13 | 8/13 | 9/13 | 5/13 | 9/13 |

3.0 Blank Assessment



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

1.0 Staff

The goal of this section is to obtain an overview of your parish's existing staff and organizational capabilities and capacities to carry out tasks related to the implementation of nonstructural mitigation projects and other flood risk reduction-related policies and programs.

1. We have completed subsection 1.1 Staff for Nonstructural Mitigation Projects in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to Section 1.1?

Name: _____ Title: _____ Phone: _____

2. We have completed subsection 1.2 Staff for Flood Risk Reduction-Related Policies and Programs in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to Section 1.2?

Name: _____ Title: _____ Phone: _____

3. Is there any way the state can help related to this topic that was not covered in the survey?

1.1 Staff for Nonstructural Mitigation Projects

Nonstructural mitigation projects recommended through CPRA's Flood Risk and Resilience Program include dozens, hundreds, or thousands of residential elevations, residential voluntary acquisitions, or non-residential dry-floodproofing actions within a single geographic area, depending on the needs of the area. This section will help us to better understand the parish's existing capacity to implement nonstructural mitigation projects of similar scale and type. We are also interested in your capacity to implement and manage other flood risk mitigation project types, such as stormwater management and drainage improvements, for example.

The following questions pertain to **RESIDENTIAL ELEVATION, RESIDENTIAL VOLUNTARY ACQUISITION, AND NON-RESIDENTIAL FLOODPROOFING** project types only. Please complete fields as accurately as possible. Type "N/A" in boxes that are not applicable to your parish.

1. Please list and provide requested information for all parish departments that employ or contract staff responsible for supporting **RESIDENTIAL ELEVATION, RESIDENTIAL VOLUNTARY ACQUISITION, AND NON-RESIDENTIAL FLOODPROOFING** project types. Click "Add New Department" to add another.

ADD NEW. Department Name _____

| Please check all activities for which staff in this department are responsible | Number of staff responsible for supporting residential elevation, residential voluntary acquisition, and non-residential floodproofing project types | Are relevant staff political appointees, civil servants, contract consultants, or other (describe)? Select all that apply. | What percent of staff time is typically dedicated to related activities? | What percent of staff time could be dedicated to related activities? |
|---|--|--|--|--|
| <input type="checkbox"/> Project funding applications <input type="checkbox"/> Grants management <input type="checkbox"/> Contracts management <input type="checkbox"/> Legal support <input type="checkbox"/> Project management <input type="checkbox"/> Data management (i.e., collection, processing, housing) <input type="checkbox"/> Outreach and engagement <input type="checkbox"/> Other (please describe) | | | | |

| 2. Please answer the following questions related to each project type | Residential Elevation | Residential Voluntary Acquisition | Non-residential Floodproofing |
|---|--|--|--|
| What is the maximum number of structures that could be mitigated (application developed and project implemented) with <u>existing parish staff</u> ? | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity |
| With whom does your parish have existing partnerships and MOUs that could be used to support project application and implementation for this project type? | <input type="checkbox"/> Municipality <input type="checkbox"/> Regional Planning Commission <input type="checkbox"/> Metropolitan Planning Organization <input type="checkbox"/> Neighboring parish <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above | <input type="checkbox"/> Municipality <input type="checkbox"/> Regional Planning Commission <input type="checkbox"/> Metropolitan Planning Organization <input type="checkbox"/> Neighboring parish <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above | <input type="checkbox"/> Municipality <input type="checkbox"/> Regional Planning Commission <input type="checkbox"/> Metropolitan Planning Organization <input type="checkbox"/> Neighboring parish <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above |
| What is the maximum number of structures that could be mitigated (application developed and project implemented) with <u>existing partnerships and MOUs</u> ? | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 <input type="checkbox"/> We need support in understanding our existing capacity |
| Does your parish have contract capacity over the next year to support <u>project funding applications</u> for this project type? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Does your parish have contract capacity over the next year to support <u>implementation</u> of this project type? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |

| 2. Please answer the following questions related to each project type | Residential Elevation | Residential Voluntary Acquisition | Non-residential Floodproofing |
|---|---|---|---|
| (If yes) What project implementation services could the contract capacity support (check all that apply)? | <input type="checkbox"/> Grant management <input type="checkbox"/> Project management <input type="checkbox"/> Program management <input type="checkbox"/> Other _____ | <input type="checkbox"/> Grant management <input type="checkbox"/> Project management <input type="checkbox"/> Program management <input type="checkbox"/> Other _____ | <input type="checkbox"/> Grant management <input type="checkbox"/> Project management <input type="checkbox"/> Program management <input type="checkbox"/> Other _____ |
| (If yes) What funding sources could the contract capacity support project implementation for (check all that apply)? | <input type="checkbox"/> FEMA Hazard Mitigation Assistance Programs <input type="checkbox"/> HUD CDBG-DR <input type="checkbox"/> Other _____ | <input type="checkbox"/> FEMA Hazard Mitigation Assistance Programs <input type="checkbox"/> HUD CDBG-DR <input type="checkbox"/> Other _____ | <input type="checkbox"/> FEMA Hazard Mitigation Assistance Programs <input type="checkbox"/> HUD CDBG-DR <input type="checkbox"/> Other _____ |
| What is the maximum number of structures that could be mitigated (project implemented) with existing <u>contract capacity</u> ? | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 | <input type="checkbox"/> None <input type="checkbox"/> 10 <input type="checkbox"/> 25 <input type="checkbox"/> 50 <input type="checkbox"/> >50 |

3. Does your parish need any staff or organizational assistance to develop and implement a project (of any size that could be reasonably expected within the parish)? Please check all that apply.

| | |
|---|--|
| <input type="checkbox"/> Project Funding Applications | <input type="checkbox"/> Grants Management |
| <input type="checkbox"/> Contracts Management | <input type="checkbox"/> Legal Support |
| <input type="checkbox"/> Data Management | <input type="checkbox"/> Outreach and Engagement |
| <input type="checkbox"/> Project Management | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> N/A | |

If so, please elaborate: _____

If any of the above are checked, please indicate what types of assistance might be of help. Please check all that apply.

| | |
|--|--|
| <input type="checkbox"/> Staff Hiring | <input type="checkbox"/> Training (describe _____) |
| <input type="checkbox"/> Technical Support (describe _____) | <input type="checkbox"/> Funding Resources |
| <input type="checkbox"/> Models and / or Data (describe _____) | |
| <input type="checkbox"/> Outreach & Engagement Support | <input type="checkbox"/> Contract / Consultant Support |
| Other _____ | |

The following questions pertain to **ANY OTHER FLOOD RISK MITIGATION PROJECT TYPE** (e.g., drainage, pump stations, coastal restoration, etc.). Please complete fields as accurately as possible. Type "N/A" in boxes that are not applicable to your parish.

4. Please list and provide requested information for all parish departments that employ or contract staff responsible for supporting **ANY OTHER FLOOD RISK MITIGATION PROJECT TYPE** (e.g., drainage, pump stations, coastal restoration, etc.). Click "Add New Department" to add another.

*

ADD NEW. Department Name _____

| Please check all activities for which staff in this department are responsible | Number of staff responsible for supporting residential elevation, residential voluntary acquisition, and non-residential floodproofing project types | Are relevant staff political appointees, civil servants, contract consultants, or other (describe)? Select all that apply. | What percent of staff time is typically dedicated to related activities? | What percent of staff time could be dedicated to related activities? |
|---|--|--|--|--|
| <input type="checkbox"/> Project funding applications <input type="checkbox"/> Grants management <input type="checkbox"/> Contracts management <input type="checkbox"/> Legal support <input type="checkbox"/> Project management <input type="checkbox"/> Data management (i.e., collection, processing, housing) <input type="checkbox"/> Outreach and engagement <input type="checkbox"/> Other (please describe) | | | | |

5. Please complete the following fields.

What is the maximum size flood risk reduction project (e.g., drainage, pump stations, coastal restoration, etc.) that could be implemented using existing parish staff?

- ___ None
- ___ \$500,000
- ___ \$10 million
- ___ \$25 million
- ___ >\$25 million

Does your parish have existing partnerships and MOUs to support project application and implementation for other flood risk reduction project types (e.g., drainage, pump stations, coastal restoration, etc.) (check all that apply):

- ☐ Municipality
- ☐ Regional Planning Commission

- ☐ Metropolitan Planning Organization
- ☐ Neighboring Parish
- ☐ Other _____
- ☐ None of the above

What is the maximum size of any other flood risk reduction project type (e.g., drainage, pump stations, coastal restoration, etc.) that could be implemented with existing partnerships and MOUs?

- ___ None
- ___ \$500,000
- ___ \$10 million
- ___ \$25 million
- ___ >\$25 million

Does your parish have contract capacity over the next year to support project funding applications for other flood risk reduction project types, (e.g., drainage, pump stations, coastal restoration, etc.) (check all that apply):

- ☐ Yes
- ☐ No

Does your parish have existing contract capacity over the next 2 years to support project implementation for other flood risk reduction project types, (e.g., drainage, pump stations, coastal restoration, etc.) (check all that apply):

- ☐ Yes
- ☐ No

If yes, what services could the contract capacity support (check all that apply)?

- ☐ Grant management
- ☐ Project management
- ☐ Program management
- ☐ Other _____

If yes, what funding sources could the contract capacity support project implementation for (check all that apply)?

- ☐ FEMA Hazard Mitigation Assistance Programs
- ☐ HUD CDBG-DR
- ☐ Other _____

What is the maximum size of any other flood risk reduction project type (e.g., drainage, pump stations, coastal restoration, etc.) that could be implemented with existing contract capacity?

- ___ None
- ___ \$500,000
- ___ \$10 million
- ___ \$25 million
- ___ >\$25 million

Does your parish need any staff or organizational assistance to develop and implement any other flood risk reduction project types (e.g., drainage, pump stations, coastal restoration, etc.) that might realistically be implemented in the parish? Please check all that apply.

___ Project Funding Applications ___ Grants Management

____ Contracts Management
____ Data Management
____ Project Management
____ N/A

____ Legal Support
____ Outreach and Engagement
____ Other _____

If any of the above are checked, please indicate what types of assistance might be of help. Please check all that apply.

____ Staff Hiring
____ Technical Support (describe _____)
____ Models and / or Data (describe _____)
____ Outreach & Engagement Support
Other _____

____ Training (describe _____)
____ Funding Resources
____ Contract / Consultant Support

6. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

7. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:

1.2 Staff and Staff Coordination Related to Flood Risk Reduction Plans, Policies, and Programs

1. Please complete fields as accurately as possible. Type "N/A" in boxes that are not applicable to your parish. *

| | Number of staff responsible for supporting (individual staff may support multiple plans, policies, and programs and may be full time or part time) | Certifications (e.g., CFM, PE, AICP) | Department(s) engaged | How are current responsible staff classified (select all that apply)? | Please assess the general proficiency of the responsible staff with using current <u>FEMA</u> Flood Insurance Rate Maps? | Please assess the general proficiency of responsible staff with understanding <u>future</u> Coastal Master Plan mapped flood risk? |
|--|--|--------------------------------------|-----------------------|---|---|---|
| Comprehensive plan development and maintenance | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Hazard mitigation plan development and maintenance | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Building permitting | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Building code enforcement | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient |

| | Number of staff responsible for supporting (individual staff may support multiple plans, policies, and programs and may be full time or part time) | Certifications (e.g., CFM, PE, AICP) | Department(s) engaged | How are current responsible staff classified (select all that apply)? | Please assess the general proficiency of the responsible staff with using current <u>FEMA</u> Flood Insurance Rate Maps? | Please assess the general proficiency of responsible staff with understanding <u>future</u> Coastal Master Plan mapped flood risk? |
|---|--|--------------------------------------|-----------------------|---|---|---|
| | | | | <input type="checkbox"/> N/A | <input type="checkbox"/> Advanced | <input type="checkbox"/> Advanced |
| Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Review of local development/ substantial improvement plans for compliance with local flood damage prevention policy | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| The NFIP's Community Rating System (CRS) program | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |

| | Number of staff responsible for supporting (individual staff may support multiple plans, policies, and programs and may be full time or part time) | Certifications (e.g., CFM, PE, AICP) | Department(s) engaged | How are current responsible staff classified (select all that apply)? | Please assess the general proficiency of the responsible staff with using current <u>FEMA</u> Flood Insurance Rate Maps? | Please assess the general proficiency of responsible staff with understanding <u>future</u> Coastal Master Plan mapped flood risk? |
|--|--|--------------------------------------|-----------------------|---|---|---|
| Local coastal zone management | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other _____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Capital improvement plan development and management | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other _____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Stormwater management | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other _____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |
| Natural resource and / or open space management (to maximize the natural and beneficial functions of the floodplain) | | | | <input type="checkbox"/> Political appointees <input type="checkbox"/> Civil servants <input type="checkbox"/> Contract consultants <input type="checkbox"/> Other _____ <input type="checkbox"/> N/A | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced | <input type="checkbox"/> Not yet using <input type="checkbox"/> Beginning <input type="checkbox"/> Developing <input type="checkbox"/> Proficient <input type="checkbox"/> Advanced |

2. Please complete the following fields for the indicated policy or program. *

| | Does your parish need any staff or organizational assistance to <u>develop</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>implement</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>enforce</u> this policy or program? | How important is this plan, policy, or program to your parish's effective operations and overall well-being? |
|---|--|--|--|--|
| Comprehensive plan development and maintenance | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Hazard mitigation plan development and maintenance | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Does your parish need any staff or organizational assistance to <u>develop</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>implement</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>enforce</u> this policy or program? | How important is this plan, policy, or program to your parish's effective operations and overall well-being? |
|----------------------------------|--|--|--|--|
| Building permitting | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Building code enforcement | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Does your parish need any staff or organizational assistance to <u>develop</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>implement</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>enforce</u> this policy or program? | How important is this plan, policy, or program to your parish's effective operations and overall well-being? |
|---|---|--|--|--|
| Local flood damage prevention policy | (i.e., updates to the policy and the development of any programs for policy compliance) <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | (i.e., review of local development and substantial improvement plans for compliance) <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| The NFIP's Community Rating System (CRS) program | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | This question not applicable to this program | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Does your parish need any staff or organizational assistance to <u>develop</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>implement</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>enforce</u> this policy or program? | How important is this plan, policy, or program to your parish's effective operations and overall well-being? |
|--------------------------------------|--|--|--|--|
| Local coastal zone management | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Capital improvement plan | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | This question not applicable to this program | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority |

| | Does your parish need any staff or organizational assistance to <u>develop</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>implement</u> this policy or program? | Does your parish need any staff or organizational assistance to <u>enforce</u> this policy or program? | How important is this plan, policy, or program to your parish's effective operations and overall well-being? |
|---|--|--|--|---|
| Natural resource and / or open space management (to maximize the natural and beneficial functions of the floodplain) | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority |
| Stormwater management | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority |

Please complete fields as accurately as possible. Type "N/A" in boxes that are not applicable to your parish. *

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|---|---|---|--|
| Comprehensive plan development and maintenance | <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/ substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | <input type="checkbox"/> Coordination unclear or not existent <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Hazard mitigation plan development and maintenance | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/ substantial improvement plans for | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|----------------------------|---|--|---|
| | <p>compliance with local flood damage prevention policy</p> <p><input type="checkbox"/> The NFIP's Community Rating System (CRS) program</p> <p><input type="checkbox"/> Local coastal zone management</p> <p><input type="checkbox"/> Capital improvement plan</p> <p><input type="checkbox"/> Natural resource and / or open space management</p> <p><input type="checkbox"/> Stormwater management</p> | | |
| Building permitting | <p><input type="checkbox"/> Comprehensive plan</p> <p><input type="checkbox"/> Hazard mitigation plan</p> <p><input type="checkbox"/> Building code enforcement</p> <p><input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions)</p> <p><input type="checkbox"/> Review of local development/ substantial improvement plans for compliance with local flood damage prevention policy</p> <p><input type="checkbox"/> The NFIP's Community Rating System (CRS) program</p> <p><input type="checkbox"/> Local coastal zone management</p> <p><input type="checkbox"/> Capital improvement plan</p> <p><input type="checkbox"/> Natural resource and / or open space management</p> <p><input type="checkbox"/> Stormwater management</p> | <p><input type="checkbox"/> Coordination unclear or not existent.</p> <p><input type="checkbox"/> Some informal coordination</p> <p><input type="checkbox"/> Informal mechanism for transparent and regular coordination</p> <p><input type="checkbox"/> Formal mechanism for transparent and regular coordination</p> | <p><input type="checkbox"/> Not a priority</p> <p><input type="checkbox"/> Some importance but not a priority</p> <p><input type="checkbox"/> Important and a priority</p> <p><input type="checkbox"/> A fundamental and critical priority.</p> |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|--|---|---|--|
| Building code enforcement | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource and / or open space management | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|--|--|---|--|
| | <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | | |
| Review of local development/ substantial improvement plans for compliance with local flood damage prevention policy | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| The NFIP's Community Rating System (CRS) program | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|--------------------------------------|---|---|--|
| | <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | | |
| Local coastal zone management | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|---|--|---|--|
| Capital improvement plan development and management | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Stormwater management | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |
| Natural resource and / or open space management (to maximize the natural and beneficial functions of the floodplain) | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/substantial improvement plans for | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

| | Do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas listed in this section? | To what extent do staff working on this plan, policy, or program actively coordinate with other internal programmatic areas checked in this section? | To what extent does cross-coordination related to this plan, policy, or program represent a priority for the parish? |
|------------------------------|--|---|--|
| | compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Stormwater management | | |
| Stormwater Management | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy enforcement (i.e., field inspections, stop work orders, other enforcement actions) <input type="checkbox"/> Review of local development/substantial improvement plans for compliance with local flood damage prevention policy <input type="checkbox"/> The NFIP's Community Rating System (CRS) program <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Natural resource and open space management <input type="checkbox"/> Capital improvement plan | <input type="checkbox"/> Coordination unclear or not existent. <input type="checkbox"/> Some informal coordination <input type="checkbox"/> Informal mechanism for transparent and regular coordination <input type="checkbox"/> Formal mechanism for transparent and regular coordination | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority. |

3. Does your parish participate in any regional planning activities or is it a member of any regional planning organizations?

Y / N

If so, please describe (*appears only if you click "Yes"*):

Is there anything else we should know related to this topic?

4. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

5. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

2.0 Funding

The goal of this section is to obtain from the parish an overview of existing availability and scope of funding for nonstructural projects and other resilience policies and programs, as well as the parish's staff capacity to implement and manage grants.

1. We have completed subsection 2.1 Availability and Scope of Funding for Nonstructural Projects in its entirety *

☐ Completed

Who may we reach out to with questions about your responses to Section 2.1?

Name: _____ Title: _____ Phone: _____

2. We have completed subsection 2.2 Grant Management Capacity in its entirety *

☐ Completed

Who may we reach out to with questions about your responses to Section 2.2?

Name: _____ Title: _____ Phone: _____

3. We have completed subsection 2.3 Availability and Scope of Funding for Other Resilience Policies and Programs in its entirety *

☐ Completed

Who may we reach out to with questions about your responses to Section 2.3?

Name: _____ Title: _____ Phone: _____

4. Is there any way the state can help related to this topic that was not covered in the survey?

2.1 Availability and Scope of Funding for Residential Elevation, Residential Voluntary Acquisition, and Non-residential Floodproofing Projects

| 1, 2, 3, 4, & 5. Please answer the following questions related to each project type | Residential Elevation | Residential Voluntary Acquisition | Non-residential Floodproofing |
|---|---|---|---|
| To what extent is this project type a priority for your parish? | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority | <input type="checkbox"/> Not a priority <input type="checkbox"/> Some importance but not a priority <input type="checkbox"/> Important and a priority <input type="checkbox"/> A fundamental and critical priority |
| How many specific structures has your parish identified for future implementation of this project type? | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need support to identify specific structures for this project type | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need support to identify specific structures for this project type | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need support to identify specific structures for this project type |
| Of the structures identified for this project type, how many have an identified funding source? | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help understanding funding options | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help understanding funding options | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help understanding funding options |
| Of the structures identified for this project type, how many property owners have been engaged? | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help engaging property owners | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help engaging property owners | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We need help engaging property owners |
| Does the parish anticipate requesting | <input type="checkbox"/> Yes, ____% share <input type="checkbox"/> No <input type="checkbox"/> Not sure yet | <input type="checkbox"/> Yes, ____% share <input type="checkbox"/> No <input type="checkbox"/> Not sure yet | <input type="checkbox"/> Yes, ____% share <input type="checkbox"/> No <input type="checkbox"/> Not sure yet |

| | | | |
|---|---|---|---|
| match from the property owners? | <input type="checkbox"/> We need help with this process | <input type="checkbox"/> We need help with this process | <input type="checkbox"/> We need help with this process |
| Please provide a rough <u>total cost</u> estimate for parish identified / planned projects | \$ _____ <input type="checkbox"/> We need help estimating project costs | \$ _____ <input type="checkbox"/> We need help estimating project costs | \$ _____ <input type="checkbox"/> We need help estimating project costs |
| Please provide a rough amount of funding still needed and unidentified to implement the identified projects | \$ _____ | \$ _____ | \$ _____ |
| Is a funding source identified for project maintenance? | N/A _____ <input type="checkbox"/> Yes, source: _____ <input type="checkbox"/> No <input type="checkbox"/> Not sure yet <input type="checkbox"/> We need help with this process | <input type="checkbox"/> Yes, source: _____ <input type="checkbox"/> No <input type="checkbox"/> Not sure yet <input type="checkbox"/> We need help with this process <input type="checkbox"/> N/A | <input type="checkbox"/> Yes, source: _____ <input type="checkbox"/> No <input type="checkbox"/> Not sure yet <input type="checkbox"/> We need help with this process <input type="checkbox"/> N/A |
| Does your parish plan to develop and submit grant applications for this project type in the next fiscal year? | <input type="checkbox"/> Yes, in-house staff will complete the application <input type="checkbox"/> Yes, with support from an external consultant <input type="checkbox"/> No <input type="checkbox"/> Haven't decided / not sure <input type="checkbox"/> We need help with this process | <input type="checkbox"/> Yes, in-house staff will complete the application <input type="checkbox"/> Yes, with support from an external consultant <input type="checkbox"/> No <input type="checkbox"/> Haven't decided / not sure <input type="checkbox"/> We need help with this process | <input type="checkbox"/> Yes, in-house staff will complete the application <input type="checkbox"/> Yes, with support from an external consultant <input type="checkbox"/> No <input type="checkbox"/> Haven't decided / not sure <input type="checkbox"/> We need help with this process |
| If you answered yes to the previous question, to which funding source will grant applications be submitted? | <input type="checkbox"/> FMA <input type="checkbox"/> PDM <input type="checkbox"/> HMGP <input type="checkbox"/> CDBG <input type="checkbox"/> Other _____ | <input type="checkbox"/> FMA <input type="checkbox"/> PDM <input type="checkbox"/> HMGP <input type="checkbox"/> CDBG <input type="checkbox"/> Other _____ | <input type="checkbox"/> FMA <input type="checkbox"/> PDM <input type="checkbox"/> HMGP <input type="checkbox"/> CDBG <input type="checkbox"/> Other _____ |

Is there anything else we should know related to this topic?

6. Please list any known available and accessible funding streams (may be locally or externally sourced) to support your parish's local match for residential elevation, residential voluntary acquisition, and / or non-residential floodproofing project implementation, and the approximate scope of work for the funding available, including years known to be available. (Note: please limit responses to the noted project types and log any other flood risk mitigation streams and scope of funding in Section 2.3.) Please write "N/A" in any boxes that are not applicable to you.

| | Available Funding Source Description | Does the source originate with the parish or another entity? (i.e., municipal or regional entity) | Amount of Funding | Fiscal Years Known to be Available | Allowable Uses of Funding |
|------------------------|--------------------------------------|---|-------------------|------------------------------------|---------------------------|
| ADD NEW FUNDING SOURCE | | <input type="checkbox"/> Parish <input type="checkbox"/> Municipality _____ <input type="checkbox"/> Regional entity ____ <input type="checkbox"/> Utility _____ <input type="checkbox"/> Private <input type="checkbox"/> Philanthropic <input type="checkbox"/> Other _____ | | | |

ADD MORE BUTTON

7. Please list any anticipated funding that may become available over the next several years (may be locally or externally sourced) to support your parish's local match for residential elevation, residential voluntary acquisition, and / or non-residential floodproofing project implementation, and the approximate scope of work for the funding available. (Note: please limit responses to the noted project types and log any other flood risk mitigation streams and scope of funding in Section 2.3.) Please write "N/A" in any boxes that are not applicable to you.

| | Anticipated Funding Source Description | Will the source originate with the parish or another entity? (i.e., municipal or regional entity) | Amount of Funding | Estimated Years of Available Funding | Allowable Uses of Funding |
|------------------|--|---|-------------------|--------------------------------------|---------------------------|
| Funding Source 1 | | <input type="checkbox"/> Parish <input type="checkbox"/> Municipality _____ <input type="checkbox"/> Regional entity ____ <input type="checkbox"/> Utility _____ <input type="checkbox"/> Private <input type="checkbox"/> Philanthropic <input type="checkbox"/> Other _____ | | | |

ADD MORE BUTTON

8. Are there any residential elevation, residential voluntary acquisition, and / or non-residential floodproofing projects for which external funding (i.e., state or Federal, foundation, non-profit, quasi-government, private sector, etc.) is available, but for which local match is not currently available? Y/N

If you answered "Yes," please complete the following table. Type "N/A" in any boxes that are not applicable to you.

| | Project Description | Total Project Cost | Match Required | Is project funding currently at risk due to the lack of local match? Y/N | When does project funding expire? |
|-----------|---------------------|--------------------|----------------|--|-----------------------------------|
| Project 1 | | | | | |

ADD MORE BUTTON

9. Please indicate the extent to which the topics covered in this Section represent a priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

10. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

2.2 Grant Management Capacity

1 & 2. Please indicate whether parish staff have experience implementing FEMA Hazard Mitigation Assistance grants, U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) grants, or any other significant funding programs for flood risk mitigation-related projects.

| Grant Program | Total amount of funding received over the last 5 years | Please describe any best practices your parish uses that you would like to share | Please describe any past issues or concerns in your parish's experience in managing the grant |
|---|--|--|---|
| FEMA Hazard Mitigation Grant Program | | | |
| FEMA Pre-Disaster Mitigation Grant Program | | | |
| FEMA Flood Mitigation Assistance | | | |
| HUD Community Development Block Grant - Disaster Recovery | | | |
| FEMA 406 (or 428) Mitigation | | | |
| Other _____ | | | |
| Other _____ | | | |
| Other _____ | | | |

3. Does your parish need assistance in building capacity to implement FEMA, HUD, and/or other federal or state mitigation or disaster recovery grants? Y / N

If so, please specify assistance needed:

- ☐ Staff Hiring
☐ Technical Support
☐ Outreach / Engagement Support
☐ Models and / or Data (describe _____)
☐ Other _____

☐ Training
☐ Funding Resources
☐ Contract / Consultant Support

4. Please indicate the extent to which the topics covered in this Section represent a priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

5. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:

2.3 Availability and Scope of Funding for Other Resilience Policies and Programs

1. Please list any available funding streams to implement and enforce other resilience policies and programs and the approximate scope of these programmatic budgets over the next fiscal year.

| | Available Funding Source (e.g. general revenue, utility fee, etc.) | Policy/Program | Amount of Funding (Next Fiscal Year) | Allowable Uses of Funding |
|------------------|--|---|--------------------------------------|---------------------------|
| Funding Source 1 | | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Building permitting <input type="checkbox"/> Building code enforcement <input type="checkbox"/> Local flood damage prevention policy / National Flood Insurance Program (NFIP) <input type="checkbox"/> The NFIP's Community Rating System (CRS) <input type="checkbox"/> Local coastal zone management <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Stormwater management <input type="checkbox"/> Natural resource and / or open space management <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ | | |

ADD MORE BUTTON

2. Does your parish need assistance funding other flood risk reduction and resilience policies and programs? Y / N

If so, please specify which policies or programs:

- ☐ Comprehensive plan
- ☐ Hazard mitigation plan
- ☐ Building permitting
- ☐ Building code enforcement
- ☐ Local flood damage prevention policy / National Flood Insurance Program (NFIP)
- ☐ The NFIP's Community Rating System (CRS)
- ☐ Local coastal zone management
- ☐ Capital improvement plan
- ☐ Natural resource and / or open space management
- ☐ Stormwater management
- ☐ Other _____
- ☐ Other _____
- ☐ Other _____

To what extent is this funding need a priority for your parish?

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

3. Most state and federal funding sources require a local matching contribution in the form of direct investment of funds or in-kind services. This is often called "local match" and is often 10 to 25 percent of the overall project cost. Please list any known available and accessible funding streams (may be locally or externally sourced) to support your parish's local match for any flood risk reduction-related project types (e.g., drainage, pump stations, coastal restoration, etc.) not covered in section 2.1, and the approximate scope of work for the funding available, including years known to be available. Please write "N/A" in any boxes that are not applicable to you.

| | Available Funding Source Description | Does the source originate with the parish or another entity? (i.e., municipal or regional entity) | Amount of Funding | Fiscal Years Known to be Available | Allowable Uses of Funding |
|------------------------|--------------------------------------|---|-------------------|------------------------------------|---------------------------|
| ADD NEW FUNDING SOURCE | | <input type="checkbox"/> Parish <input type="checkbox"/> Municipality _____ <input type="checkbox"/> Regional entity ____ <input type="checkbox"/> Utility _____ <input type="checkbox"/> Private <input type="checkbox"/> Philanthropic <input type="checkbox"/> Other _____ | | | |

ADD MORE BUTTON

4. What is your parish's capacity to provide local match for other flood risk reduction-related project types (e.g., drainage, pump stations, coastal restoration, etc.), in general?

- ☐ Does not meet immediate project funding needs (over the next fiscal year)
- ☐ Meets immediate project funding needs (over the next fiscal year)
- ☐ Meets or exceeds immediate project funding needs (over the next fiscal year) but not expected needs over the next 3 to 5 years
- ☐ Meets or exceeds the parish's immediate project funding needs (over the next fiscal year), and also meets project funding needs over the next 3 to 5 years

5. Please list any anticipated funding that may become available over the next several years (may be locally or externally sourced) to support your parish's local match for any other flood risk reduction-related project types (e.g., drainage, pump stations, coastal restoration, etc.) not covered in section 2.1, and the approximate scope of work for the funding available. Please write "N/A" in any boxes that are not applicable to you.

| | Anticipated Funding Source Description | Will the source originate with the parish or another entity? (i.e., municipal or regional entity) | Amount of Funding | Estimated Years of Available Funding | Allowable Uses of Funding |
|------------------|--|---|-------------------|--------------------------------------|---------------------------|
| Funding Source 1 | | <input type="checkbox"/> Parish <input type="checkbox"/> Municipality _____ <input type="checkbox"/> Regional entity ____ <input type="checkbox"/> Utility _____ <input type="checkbox"/> Private <input type="checkbox"/> Philanthropic <input type="checkbox"/> Other _____ | | | |

ADD MORE BUTTON

6. Are there any other flood-risk reduction-related projects (e.g., drainage, pump stations, coastal restoration, etc.) not covered in section 2.1 for which external funding (i.e., state or Federal, foundation, non-profit, quasi-government, private sector, etc.) is available, but for which local match is not currently available? Y/N

If you answered "Yes," please complete the following table. Type "N/A" in any boxes that are not applicable to you.

| | Project Description | Total Project Cost | Match Required | Is project funding currently at risk due to the lack of local match? Y/N | When does project funding expire? |
|-----------|---------------------|--------------------|----------------|--|-----------------------------------|
| Project 1 | | | | | |

ADD MORE BUTTON

7. Please indicate the extent to which the topics covered in this Section represent a priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

8. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

3.0 Mitigation History

In this section, parishes have an opportunity to provide information on their capabilities and capacities to implement and maintain nonstructural mitigation projects, as well as to educate and engage parish residents in the process.

1. We have completed subsection 3.1 Local Awareness of Flood Risk and Need for Planning/Mitigation in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

2. We have completed subsection 3.2 Mitigation History in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

3. We have completed subsection 3.3 Nonstructural Project Maintenance Capabilities in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

Is there any way the state can help related to this topic that was not covered in the survey?

3.1 Local Awareness of Flood Risk and Planning and Mitigation Needs

1. Does the parish currently engage in active education or outreach to make people aware of current flood risk as defined by FEMA Flood Insurance Rate Maps? Y/N

(only comes up with a yes) What education and outreach activities are currently being used to make people aware of current flood risk as defined by FEMA Flood Insurance Rate Maps? Check all that apply.

| | | | |
|-------------------------------|--|-------------------------------------|--|
| Website | <input type="checkbox"/> If checked, please provide link_____ | Public Meetings or Workshops | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Social Media | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ | Focus Groups | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Flyers or Brochures | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ | Neighborhood / Civic Groups | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed |
| Mailings / Newsletters | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ | Targeted Outreach | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ |

2. Does the parish currently engage in active education or outreach to make people aware of current flood risk as defined by the Louisiana Coastal Master Plan? Y/N

(only comes up with a yes) What education and outreach activities are currently being used to make people aware of current flood risk as defined by the Louisiana Coastal Master Plan? Check all that apply.

| | | | |
|-------------------------------|--|-------------------------------------|--|
| Website | <input type="checkbox"/> If checked, please provide link_____ | Public Meetings or Workshops | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Social Media | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ | Focus Groups | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Flyers or Brochures | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ | Neighborhood / Civic Groups | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed |
| Mailings / Newsletters | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other_____ <input type="checkbox"/> Other_____ | Targeted Outreach | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other_____ <input type="checkbox"/> Other_____ |

3. Does the parish currently engage in active education or outreach to make people aware of expected future flood risk as defined by the Louisiana Coastal Master Plan? Y/N

(only comes up with a yes) What education and outreach activities are currently being used to make people aware of expected future flood risk as defined by the Louisiana Coastal Master Plan? Check all that apply.

| | | | |
|-------------------------------|--|-------------------------------------|--|
| Website | <input type="checkbox"/> If checked, please provide link _____ | Public Meetings or Workshops | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Social Media | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ | Focus Groups | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Flyers or Brochures | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ | Neighborhood / Civic Groups | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed |
| Mailings / Newsletters | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ | Targeted Outreach | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ |

4. What is your parish's capacity to educate and make residents aware of FEMA Flood Insurance Rate Maps?

- ☐ Parish capacity does not meet parish current education and outreach needs
- ☐ Parish capacity partially meets current education and outreach needs
- ☐ Parish capacity entirely meets or exceeds the parish's current needs, but not expected future education and outreach needs
- ☐ Parish capacity entirely meets or exceeds the parish's current and expected future education and outreach needs

5. What is your parish's capacity to educate and make residents aware of current and expected future flood risk as defined by the Louisiana Coastal Master Plan?

- ☐ Parish capacity does not meet parish current education and outreach needs
- ☐ Parish capacity partially meets current education and outreach needs
- ☐ Parish capacity entirely meets or exceeds the parish's current needs, but not expected future education and outreach needs
- ☐ Parish capacity entirely meets or exceeds the parish's current and expected future education and outreach needs

6, 7, & 8. Please complete fields as accurately as possible. Check all that apply.

| | What are the most effective ways to make people aware of potential future flood risk? Check all that apply. | What are the most effective ways to build awareness and support for any flood risk mitigation-related <u>project</u> ? | What are the most effective ways to build awareness and support for flood risk mitigation-related <u>policies</u> ? |
|-------------------------------------|--|--|--|
| Website | <input type="checkbox"/> If checked, please provide link_____ | <input type="checkbox"/> If checked, please provide link_____ | <input type="checkbox"/> If checked, please provide link_____ |
| Social Media | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ | <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> Other _____ |
| Flyers or Brochures | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ | <input type="checkbox"/> If checked, please indicate where these are most often posted: <input type="checkbox"/> Local government buildings <input type="checkbox"/> Library <input type="checkbox"/> Local businesses <input type="checkbox"/> Public bulletin boards <input type="checkbox"/> Other _____ |
| Mailings / Newsletters | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other_____ <input type="checkbox"/> Other_____ | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other_____ <input type="checkbox"/> Other_____ | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other_____ <input type="checkbox"/> Other_____ |
| Public Meetings or Workshops | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Focus Groups | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regularly scheduled <input type="checkbox"/> Intermittent / As needed |
| Neighborhood / Civic Groups | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed | <input type="checkbox"/> Regular coordination <input type="checkbox"/> Intermittent / As needed |

| | What are the most effective ways to make people aware of potential future flood risk? Check all that apply. | What are the most effective ways to build awareness and support for any flood risk mitigation-related <u>project</u> ? | What are the most effective ways to build awareness and support for flood risk mitigation-related <u>policies</u> ? |
|--------------------------|--|--|--|
| Targeted Outreach | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ | <input type="checkbox"/> Repetitive loss areas <input type="checkbox"/> Local Businesses <input type="checkbox"/> Residents <input type="checkbox"/> Utilities <input type="checkbox"/> Major employers <input type="checkbox"/> Essential facilities (e.g., hospitals, police departments) <input type="checkbox"/> Schools: K-12 education <input type="checkbox"/> Schools: universities <input type="checkbox"/> Other _____ <input type="checkbox"/> Other _____ |
| Other (describe) | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

9. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

10. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to these topics

3.2 Mitigation History

Please complete fields as accurately as possible. Check all that apply.

| 1 & 2. Please answer the following questions related to each project type | Residential Elevation | Residential Voluntary Acquisition | Non-residential Floodproofing |
|--|--|--|--|
| Please select the number of structures mitigated by your parish over the last 5 years (including parish funded and grant funded projects) | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not have this information | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not have this information | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not have this information |
| Please select the number of structures mitigated <i>in</i> your parish over the last 5 years (not completed by or in close coordination with the parish) | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not track this information | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not track this information | <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 50+ <input type="checkbox"/> We do not track this information |
| Was low-to-moderate income (LMI) a factor in the selection of the structures for mitigation? | <input type="checkbox"/> Yes, not required by funding source <input type="checkbox"/> Yes, it was required by the funding source <input type="checkbox"/> No <input type="checkbox"/> Not sure | <input type="checkbox"/> Yes, not required by funding source <input type="checkbox"/> Yes, it was required by the funding source <input type="checkbox"/> No <input type="checkbox"/> Not sure | <input type="checkbox"/> Yes, not required by funding source <input type="checkbox"/> Yes, it was required by the funding source <input type="checkbox"/> No <input type="checkbox"/> Not sure |
| Which of the following would be helpful support to receive in order to complete projects of this type? | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ | <input type="checkbox"/> Staff Hiring <input type="checkbox"/> Training <input type="checkbox"/> Technical Support <input type="checkbox"/> Funding Resources <input type="checkbox"/> Models and / or Data (describe _____) <input type="checkbox"/> Outreach / Engagement Support <input type="checkbox"/> Contract / Consultant Support <input type="checkbox"/> Other _____ |

If there are other flood risk reduction project types (for example, drainage projects, roadway elevation, critical infrastructure mitigation), your parish would like considered as part of this survey, please click **ADD NEW**.

3. Please rate the effectiveness of the below project types at mitigating each source of flood risk in your parish

| | Hurricanes / Tropical Storms | High tides | Stormwater flooding | Riverine flooding |
|--|---|---|---|---|
| Residential Elevation | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable |
| Residential Voluntary Acquisition | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable |
| Non-residential Floodproofing | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective <input type="checkbox"/> Not applicable |
| If there are other flood risk reduction project types, your parish would like considered as part of this survey, please click ADD NEW . | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective | <input type="checkbox"/> Effective <input type="checkbox"/> Somewhat effective <input type="checkbox"/> Somewhat ineffective <input type="checkbox"/> Ineffective |

4. Has your parish ever been subject to a state or federal audit related to any funding for flood risk reduction projects?

- State audit Y/ N
- Federal Y/N

If you answered "Yes" to either, what were the findings? Were they addressed and cleared?

5. Aside from the questions above, has your parish undertaken any work to assist low- to moderate income households in any other way with flood risk reduction? Y/N

Please check all that apply (*appears only if you click yes*):

- ☐ Targeted outreach. Please describe _____
- ☐ Support programs. Please describe _____
- ☐ Financial support. Please describe _____
- ☐ Other _____

6. Aside from the questions above, has your parish undertaken any work to assist other vulnerable populations (e.g., the elderly, minority communities, homeless populations, children, persons with special needs) in any other way with flood risk reduction? Y/N

Please check all that apply (*appears only if you click yes*):

- ☐ Targeted outreach. Please describe _____
- ☐ Support programs. Please describe _____
- ☐ Financial support. Please describe _____
- ☐ Other _____

7. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

8. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:

3.3 Project Maintenance

1. Has the parish implemented any residential acquisition projects for flood risk reduction purposes over the last five years? Y / N

(appears only if you click Yes) If the parish has implemented residential acquisition projects for flood risk reduction purposes, are all properties presently managed in a manner compatible with maintaining the natural and beneficial functions of the floodplain (i.e., land was converted to a recreational parkland, greenspace, or other compatible use)? Y/N

Please explain: _____

(appears only if you click No): Do you have any interest in learning more about the benefits of acquired green space, case studies of successful projects and best practices? Y / N

Please provide any specific requests: _____

2. Have maintenance or other tax base implications from residential acquisitions led to decisions in your parish not to participate in residential acquisitions? Y/N

Please explain *(appears only if you click Yes)*: _____

3. Has the parish implemented any non-residential floodproofing projects for flood risk reduction purposes over the last five years? Y / N

(appears only if you click Yes) If the parish has implemented non-residential floodproofing projects for flood risk reduction purposes, did the parish consistently ensure that the funding recipients had a regular maintenance and exercise plan in place? Y / N

4. Does your parish need any assistance with long-term operations and/or maintenance of past, present, or planned residential acquisition projects? Y/N

If you answered "Yes," please indicate what types of assistance might be of help:

| | |
|---|-------------------------|
| _____ Staff Hiring | _____ Training |
| _____ Technical Support | _____ Funding Resources |
| _____ Models and / or Data (describe _____) | |
| _____ Contract / Consultant Support | _____ Other _____ |

5. What existing project maintenance programs does your parish currently have established?

Please check all that apply:

- Canal project maintenance program
- Flood prevention project maintenance program
- Levee safety program
- Stormwater/drainage maintenance program
- Other _____
- Other _____
- Other _____
- None of the above

Does your parish need any assistance with long-term operations and/or maintenance of any of the above? Y/N

If you answered "Yes," please indicate what types of assistance might be of help:

| | |
|---|-------------------------|
| _____ Staff Hiring | _____ Training |
| _____ Technical Support | _____ Funding Resources |
| _____ Models and / or Data (describe _____) | |
| _____ Contract / Consultant Support | _____ Other _____ |

6. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

7. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

4.0 Flood Damage Prevention Policies and Programs

This section includes questions about existing policies and programs. There is also an opportunity for parishes to indicate what types of assistance or training they might need for effective floodplain management.

1. We have completed subsection 4.1 Flood Risk Reduction Plans and Policies in its entirety *

☐ Completed

Who may we reach out to with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

2. We have completed subsection 4.2 Public and Political Support and Incentives in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

3. We have completed subsection 4.3 Implementation of Flood Risk Management Standards in its entirety *

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

Is there any way the state can help related to this topic that was not covered in the survey?

4.1 Flood Risk Reduction Plans and Policies

1. Please complete fields as accurately as possible. Type "N/A" in boxes that are not applicable to your parish. *

| | Parish Comprehensive Plan | Parish Floodplain Management Plan | FEMA Approved Parish Hazard Mitigation Plan | Parish Local Coastal Zone Management Plan |
|--|--|--|--|--|
| Has your parish adopted this plan type? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No |
| (if yes) Please provide a link to the plan | | | | |
| (if yes) When was the plan last updated? | | | | |
| (if yes) What sources of flooding are addressed? Check all that apply | <input type="checkbox"/> Flooding not addressed <input type="checkbox"/> Coastal (i.e., storm surge or high tides) <input type="checkbox"/> Riverine <input type="checkbox"/> Stormwater <input type="checkbox"/> Other_____ | <input type="checkbox"/> Flooding not addressed <input type="checkbox"/> Coastal (i.e., storm surge or high tides) <input type="checkbox"/> Riverine <input type="checkbox"/> Stormwater <input type="checkbox"/> Other_____ | <input type="checkbox"/> Flooding not addressed <input type="checkbox"/> Coastal (i.e., storm surge or high tides) <input type="checkbox"/> Riverine <input type="checkbox"/> Stormwater <input type="checkbox"/> Other_____ | <input type="checkbox"/> Flooding not addressed <input type="checkbox"/> Coastal (i.e., storm surge or high tides) <input type="checkbox"/> Riverine <input type="checkbox"/> Stormwater <input type="checkbox"/> Other_____ |
| To what extent Is future expected flood risk addressed in the plan (either due to environmental or development changes or both)? | <input type="checkbox"/> Future expected flood risk is not addressed <input type="checkbox"/> Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed <input type="checkbox"/> Future expected flood risk is clearly defined, but not integrated into planning <input type="checkbox"/> Future expected flood risk is integrated into planning | <input type="checkbox"/> Future expected flood risk is not addressed <input type="checkbox"/> Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed <input type="checkbox"/> Future expected flood risk is clearly defined, but not integrated into planning <input type="checkbox"/> Future expected flood risk is integrated into planning | <input type="checkbox"/> Future expected flood risk is not addressed <input type="checkbox"/> Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed <input type="checkbox"/> Future expected flood risk is clearly defined, but not integrated into planning <input type="checkbox"/> Future expected flood risk is integrated into planning | <input type="checkbox"/> Future expected flood risk is not addressed <input type="checkbox"/> Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed <input type="checkbox"/> Future expected flood risk is clearly defined, but not integrated into planning <input type="checkbox"/> Future expected flood risk is integrated into planning |

| | Parish Comprehensive Plan | Parish Floodplain Management Plan | FEMA Approved Parish Hazard Mitigation Plan | Parish Local Coastal Zone Management Plan |
|--|--|--|--|--|
| Please indicate which of the following projections are considered within the plan. | <input type="checkbox"/> Population changes <input type="checkbox"/> Development patterns / changes to the built environment <input type="checkbox"/> Changes to the natural environment <input type="checkbox"/> Climate and weather pattern changes <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above | <input type="checkbox"/> Population changes <input type="checkbox"/> Development patterns / changes to the built environment <input type="checkbox"/> Changes to the natural environment <input type="checkbox"/> Climate and weather pattern changes <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above | <input type="checkbox"/> Population changes <input type="checkbox"/> Development patterns / changes to the built environment <input type="checkbox"/> Changes to the natural environment <input type="checkbox"/> Climate and weather pattern changes <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above | <input type="checkbox"/> Population changes <input type="checkbox"/> Development patterns / changes to the built environment <input type="checkbox"/> Changes to the natural environment <input type="checkbox"/> Climate and weather pattern changes <input type="checkbox"/> Other _____ <input type="checkbox"/> None of the above |
| Does the plan address climate change related hazards, such as sea level rise, changes in precipitation? | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No |
| Does this plan guide land use development in your parish? (Please describe) | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No |
| (if yes) Does this plan guide flood risk reduction project activity in your parish? (Please describe) | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No |

| | Parish Comprehensive Plan | Parish Floodplain Management Plan | FEMA Approved Parish Hazard Mitigation Plan | Parish Local Coastal Zone Management Plan |
|---|---|---|---|---|
| (if yes) Does the plan identify specific flood hazard mitigation projects (e.g., structure elevation, floodproofing, drainage improvements, etc.)? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples |
| (if yes) Does the plan assess how other plans complement this plan? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples |
| (if yes) Is the plan vertically integrated with the State's Hazard Mitigation Plan, CPRA's Master Plan, or in line with other federal policies aimed to reduce flood risk? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples |
| (if yes) Which other parish plans are aligned with the plan? | <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource management plan <input type="checkbox"/> Floodplain management plan <input type="checkbox"/> Local coastal zone management plan <input type="checkbox"/> Other _____ | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource management plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Local coastal zone management plan <input type="checkbox"/> Other _____ | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource management plan <input type="checkbox"/> Floodplain management plan <input type="checkbox"/> Local coastal zone management plan <input type="checkbox"/> Other _____ | <input type="checkbox"/> Comprehensive plan <input type="checkbox"/> Capital improvement plan <input type="checkbox"/> Natural resource management plan <input type="checkbox"/> Floodplain management plan <input type="checkbox"/> Hazard mitigation plan <input type="checkbox"/> Other _____ |

| | Parish Comprehensive Plan | Parish Floodplain Management Plan | FEMA Approved Parish Hazard Mitigation Plan | Parish Local Coastal Zone Management Plan |
|---|---|---|---|---|
| | | | | |
| Is the plan integrated into other regional or cross-parish planning documents? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples |
| Is there a mechanism in place to ensure that this parish plan and related municipal plans are aligned? | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples | <input type="checkbox"/> Yes <input type="checkbox"/> In progress <input type="checkbox"/> No If yes, please provide examples |
| (if yes) Does the plan address land use planning and zoning as a risk reduction measure? | <input type="checkbox"/> Not addressed <input type="checkbox"/> Mentioned, but with no actions assigned <input type="checkbox"/> Described in detail, but no actions assigned <input type="checkbox"/> Specific actions assigned | <input type="checkbox"/> Not addressed <input type="checkbox"/> Mentioned, but with no actions assigned <input type="checkbox"/> Described in detail, but no actions assigned <input type="checkbox"/> Specific actions assigned | <input type="checkbox"/> Not addressed <input type="checkbox"/> Mentioned, but with no actions assigned <input type="checkbox"/> Described in detail, but no actions assigned <input type="checkbox"/> Specific actions assigned | <input type="checkbox"/> Not addressed <input type="checkbox"/> Mentioned, but with no actions assigned <input type="checkbox"/> Described in detail, but no actions assigned <input type="checkbox"/> Specific actions assigned |
| Does the plan account for uncertainties about future conditions (such as the rate of SLR or specific changes in the built environment)? | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No | <input type="checkbox"/> Yes, please explain: _____ <input type="checkbox"/> In progress <input type="checkbox"/> No |

Please select ADD NEW for any other plans you would like considered as part of this survey. Options may include parish resilience plan, capital improvement plan, and/or natural resource management plan, etc.

2. Does your parish have a local flood damage prevention ordinance? Y/N/Unsure

Please provide the link to the ordinance (*appears only if you click Yes*):

When was the ordinance last updated? (*appears only if you click Yes*) _____

Do you feel as though your parish has what it needs to enforce your current flood damage prevention ordinance? (*appears only if you click Yes*) Y/N

(*appears only if you click No*): Please explain

2.a. Do you currently evaluate the potential impacts of new development or capital improvement projects on the floodplain? Y/N

How do you conduct this evaluation? (*appears only if you click Yes*):

Do you retain the results of this evaluation? (*appears only if you click Yes*): Y/N

2.b. Does your parish's flood damage prevention ordinance (or other governing policy) provide the following:

- a. Restrictions on development in the floodplain? Y / N
- b. Freeboard for residential properties? Y / N
- c. Standards for flood damage prevention of critical infrastructure? Y / N
- d. On-site stormwater retention standards? Y/N
- e. Other higher standards? _____

3. Does your parish currently need any resources for effective floodplain management?

Please check all that apply.

- | | |
|---|---------------------------------------|
| _____ Staff Resources | _____ Funding Resources |
| _____ Technical Expertise | _____ Project Management Expertise |
| _____ Construction Management Expertise | _____ Floodplain Management Expertise |
| _____ Models and / or Data (describe _____) | |
| _____ Engineering Design Expertise | _____ Other _____ |

Please explain (*appears only if any are checked*):

What types of support would assist the parish with improving flood risk reduction related programs (including, but not limited to, floodplain management programs, parish comprehensive plan programs, hazard mitigation plan programs, etc.)?

Please check all that apply.

- | | |
|---|---------------------------------------|
| _____ Staff Resources | _____ Funding Resources |
| _____ Technical Expertise | _____ Project Management Expertise |
| _____ Construction Management Expertise | _____ Floodplain Management Expertise |
| _____ Hazard Mitigation Expertise | _____ Master Plan Expertise |
| _____ Models and / or Data (describe _____) | |
| _____ Engineering Design Expertise | _____ Other _____ |

Please explain:

4. What is your parish's capacity to develop flood damage prevention policies and ordinances?

- ☐ Does not meet current needs.
- ☐ Partially meets current needs.
- ☐ Entirely meets or exceeds the parish's current needs, but not expected future needs.
- ☐ Entirely meets or exceeds the parish's current and expected future needs.

Please explain:

5. What is your parish's capacity to implement and enforce flood damage prevention policies and ordinances?

- ☐ Does not meet current needs.
- ☐ Partially meets current needs.
- ☐ Entirely meets or exceeds the parish's current needs, but not expected future needs.
- ☐ Entirely meets or exceeds the parish's current and expected future needs.

Please explain:

6. Please indicate the extent to which the topics covered in this Section represent a current or near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

7. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:

4.2 Public and Political Support and Incentives

1. the past 5 years, has your parish attempted to implement any policies, ordinances, or programs that would reduce flood risk but were not adopted due to a lack of public and/or political support? Y / N

Please check all that apply (*appears only if you click Yes*):

- ☐ Utility fees, improvement districts, or other revenue generating source to fund the implementation of flood risk mitigation-related projects and / or programs
- ☐ Higher than NFIP-minimum flood damage prevention ordinance standards, such as freeboard for residential properties
- ☐ Zoning and land use regulations
- ☐ Other _____
- ☐ Other _____
- ☐ Other _____

2. Is there support by parish staff to re-evaluate existing and/or advance the development of new policies and ordinances (such as utility fees or improvement districts to increase funding for flood risk reduction or higher development standards) that reduce flood risk? Y / N

Please explain: _____

If you clicked "Yes," has the parish provided a forum for education or discussion to foster that support? (*appears only if you click Yes*) Y/N

- (If yes) With the public, elected officials, or both?
 - ☐ Public
 - ☐ Elected officials
 - ☐ Both

3. Have staff faced challenges enforcing flood damage prevention policies, including:

- a. Flood damage prevention development standards (e.g., project or new construction planning and design phase): Y / N

Please explain (*appears only if you click Yes*):

- b. Flood damage prevention code enforcement (e.g., difficulty remediating unpermitted or noncompliant activity in the floodplain): Y / N

Please explain (*appears only if you click Yes*):

- c. Substantial damage or substantial improvement requirements (e.g., structure renovation planning): Y / N

Please explain (*appears only if you click Yes*):

- d. Other? Y / N

Please explain (*appears only if you click Yes*):

4. What is your parish's capability (skills, authority) for day to day policy implementation and enforcement of flood risk reduction-related policy?

- ☐ Does not meet current needs.
- ☐ Partially meets current needs.
- ☐ Entirely meets or exceeds the parish's current needs, but not expected future needs.
- ☐ Entirely meets or exceeds the parish's current and expected future needs.

Please explain:

5. What is your parish's capacity (resources) for day to day policy implementation and enforcement of flood risk reduction-related policy?

- ☐ Does not meet current needs.
- ☐ Partially meets current needs.
- ☐ Entirely meets or exceeds the parish's current needs, but not expected future needs.
- ☐ Entirely meets or exceeds the parish's current and expected future needs.

Please explain:

6. What types of support would assist the parish with improving enforcement of flood risk reduction related policies (including, but not limited to, flood damage prevention ordinance, land use code, etc.)?

Please check all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Staff Resources | <input type="checkbox"/> Funding Resources |
| <input type="checkbox"/> Technical Expertise | <input type="checkbox"/> Project Management Expertise |
| <input type="checkbox"/> Engineering Design Expertise | <input type="checkbox"/> Construction Management Expertise |
| <input type="checkbox"/> Floodplain Management Expertise | <input type="checkbox"/> Master Plan Expertise |
| <input type="checkbox"/> Hazard Mitigation Expertise | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Models and / or Data (describe _____) | |

Please explain:

7. What programs are being used at the parish level to encourage flood risk reduction by private property owners and / or developers at the site-specific scale? (Please check all that apply)

- ☐ Infrastructure entitlements
- ☐ Sinking fund
- ☐ Cost share programs
- ☐ Payment and/or tax/fee breaks for developers
- ☐ Payment and/or tax/fee breaks for homeowners
- ☐ Other _____

Please explain:

8. What types of support would assist the parish with encouraging property owners and developers to implement site-specific flood risk reduction measures? (Please check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Staff Resources | <input type="checkbox"/> Funding Resources |
| <input type="checkbox"/> Technical Expertise | <input type="checkbox"/> Project Management Expertise |
| <input type="checkbox"/> Engineering Design Expertise | <input type="checkbox"/> Construction Management Expertise |
| <input type="checkbox"/> Floodplain Management Expertise | <input type="checkbox"/> Master Plan Expertise |
| <input type="checkbox"/> Hazard Mitigation Expertise | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Models and / or Data (describe _____) | |

Please explain:

9. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

10. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:

4.3 Implementation of Flood Risk Management Standards

1. To what degree does your parish integrate future flood risk and future-oriented land use planning approaches in other practical decision making?

| Existing Plan | 1 - Future expected flood risk is not addressed | 2 - Future expected flood risk is mentioned, but not clearly mapped, defined, or addressed | 3 - Future expected flood risk is clearly defined, but not integrated into process or planning | 4 - Future expected flood risk is integrated into process or planning |
|--|---|--|--|---|
| Development or substantial improvement plan review for compliance with the flood damage prevention ordinance | | | | |
| Capital improvement plan development and management | | | | |
| Other (i.e., if the parish has an additional asset management plan) | | | | |

2. Has the parish implemented any of the following:

- Building 2 feet above the 100-year (1% annual chance) FEMA BFE for most standard projects? Y / N
- Building 3 feet above FEMA BFE for critical buildings, such as hospitals and evacuation centers? Y / N
- Building to the FEMA 500-year (0.2% annual chance) flood elevation? Y / N
- Building to higher standards identified in the Coastal Master Plan, describe:

- Other? _____

(if answers to a, b, c, and d are "No", the following questions appear):

What are the types of assistance (e.g., technical, community outreach) that could be provided to support implementation of these or equivalent higher-than-NFIP minimum flood risk management standards?

Please check all that apply.

- | | |
|---|---|
| <input type="checkbox"/> Staff Resources | <input type="checkbox"/> Engineering Design Expertise |
| <input type="checkbox"/> Funding Incentives | <input type="checkbox"/> Stakeholder Outreach |
| <input type="checkbox"/> Information that demonstrates how such standards will benefit the parish | |
| <input type="checkbox"/> Models and / or Data (describe _____) | |
| <input type="checkbox"/> Other _____ | |

Please explain:

3. Do you maintain a list of repetitive loss properties in your parish? Y/N

- (If yes): If so, please describe any risk reduction-related actions your parish has taken related to repetitive loss properties (Please check all that apply):

| | |
|--|--|
| <input type="checkbox"/> Elevation | <input type="checkbox"/> Targeted Outreach |
| <input type="checkbox"/> Acquisition | <input type="checkbox"/> Other |
| <input type="checkbox"/> Drainage improvements | |
| <input type="checkbox"/> Levees or Floodwalls | |
- (If yes): Have repetitive loss properties affected planned future development in your parish? Y / N Please explain _____
- (If yes): Has the presence of repetitive loss properties affected property values in your parish? Y/N/Unsure
Please explain: _____

4. What is your parish's capability (skills, authority) to integrate future-oriented land use planning into mitigation planning?

- ☐ Do not meet current needs.
- ☐ Partially meet current needs.
- ☐ Entirely meet or exceed the parish's current needs, but not expected future needs.
- ☐ Entirely meet or exceed the parish's current and expected future needs.

Please explain. _____

5. What is your parish's capacity (resources) to integrate future-oriented land use planning into mitigation planning?

- ☐ Do not meet current needs.
- ☐ Partially meet current needs.
- ☐ Entirely meet or exceed the parish's current needs, but not expected future needs.
- ☐ Entirely meet or exceed the parish's current and expected future needs.

Please explain. _____

6. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

7. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

5.0 External Relations

The goal of this section is to obtain an overview of how parishes coordinate and collaborate with other parishes, municipalities, academic/research institutes, and regional entities for flood risk mitigation and related planning and policy.

We have completed section 5.0 External Relations in its entirety*

☐ Completed

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

Is there any way the state can help related to this topic that was not covered in the survey?

1. Please complete fields as accurately as possible.

| Related to floodplain management and flood risk reduction activities... | Is this a way in which your parish <u>provides</u> support to other parishes? | Is this a way in which your parish <u>receives</u> support from other parishes? | Is this a way in which your parish would be <u>willing to provide</u> support to other parishes? | Is this a way in which your parish would <u>like to receive</u> support from other parishes? |
|---|---|---|--|--|
| Staff Resources | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Construction Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Funding and Financing | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Floodplain Management | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Outreach and Engagement | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Engineering Design Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Project Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Other | | | | |

2. Does your parish coordinate closely with any other parishes on flood risk reduction and related planning and policy? Y/N

(only comes up with a yes) Please list the parishes with which you closely coordinate:

(only comes up with a yes) Please describe the extent and nature of these relationship(s):

3. Please complete fields as accurately as possible.

☐ Click here if your parish does not have a municipality (skips this section)

| Related to floodplain management and flood risk reduction activities... | Is this a way in which your parish <u>provides</u> support to municipalities in your parish? | Is this a way in which your parish <u>receives</u> support from municipalities in your parish? | Is this a way in which your parish would be <u>willing to provide</u> support to municipalities in your parish? | Is this a way in which your parish would <u>like to receive</u> support from municipalities in your parish? |
|---|--|--|---|---|
| Staff Resources | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Construction Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Funding and Financing | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Floodplain Management | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Outreach and Engagement | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Engineering Design Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Project Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Other | | | | |

4. Does your parish coordinate closely with municipalities within your parish on flood risk reduction and related planning and policy? Y/N

(only comes up with a yes) Please describe the extent and nature of these relationship(s):

5. Please complete fields as accurately as possible.

| Related to floodplain management and flood risk reduction activities... | Is this a way in which your parish <u>provides</u> support to regional organizations (such as a regional planning commission)? | Is this a way in which your parish <u>receives</u> support from regional organizations (such as a regional planning commission)? | Is this a way in which your parish would be <u>willing to provide</u> support to regional organizations (such as a regional planning commission)? | Is this a way in which your parish would <u>like to receive</u> support from regional organizations (such as a regional planning commission)? |
|---|--|--|---|---|
| Staff Resources | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Construction Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Funding and Financing | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Floodplain Management | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Outreach and Engagement | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Engineering Design Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Project Management Expertise | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Other | | | | |

6. Does your parish participate in any regional planning coordination related to floodplain or watershed management or flood damage prevention? Y/N

(only comes up with a yes) Please explain: _____

7. Does your parish use any academic and / or research institute partnerships to assist with planning and mitigation activities? For example, utilizing academic partners to conduct research projects and studies, contribute technical expertise, develop local plans and designs, or offer internship positions to assist with planning and mitigation activities? Y/N

| | Partnering Institute (e.g., LA Sea Grant, LSU AgCenter, etc.) | Type of Partnership | Describe |
|---------------|---|--|----------|
| Partnership 1 | | <input type="checkbox"/> Research project/study <input type="checkbox"/> Technical expertise <input type="checkbox"/> Developing local plans or designs <input type="checkbox"/> Internship positions <input type="checkbox"/> Other _____ | |

ADD NEW

8. Would your parish like to develop additional partnerships with academic and research institutes to promote any of the above activities? Y/N

Please explain:

9. To what degree does external coordination meet your parish's flood risk reduction-related needs?

- ☐ No coordination at this time / Needs not met
- ☐ Some coordination that partially meets parish needs
- ☐ Coordination entirely meets or exceeds parish's current needs, but not expected future needs
- ☐ Coordination entirely meets or exceeds the parish's current and expected future needs

Please explain:

10. To what extent do you coordinate with regulatory entities with responsibilities related to preserving the natural and beneficial function of floodplains for project and new construction proposal development?

USACE

- ☐ Always
- ☐ Sometimes
- ☐ Seldom
- ☐ Never
- ☐ Not applicable

LDNR

- ☐ Always
- ☐ Sometimes
- ☐ Seldom
- ☐ Never
- ☐ Not applicable

LDWF – Scenic Rivers

- ☐ Always
- ☐ Sometimes
- ☐ Seldom
- ☐ Never
- ☐ Not applicable

11. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

12. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Survey Section

6.0 Data Gathering and Maintenance

In this final section, your parish has an opportunity to provide specifics on existing data as well as your processes of and systems for gathering, maintaining, and updating data important to flood risk and resilience programs.

To whom may we reach out with questions about your responses to this section?

Name: _____ Title: _____ Phone: _____

Is there any way the state can help related to this topic that was not covered in the survey?

1. Does your parish have a Geographic Information System (GIS) department in place? Y / N

- (If no): Are parish staff capable of providing GIS assistance? Y/N
- (If no): Does parish engage in external coordination that provides GIS assistance? Y/N
- (If yes): How many staff members do you have in your GIS department? _____
- (If yes): What GIS software does your parish use (by name)? _____
- (If yes): Does the parish GIS system serve as a repository for flood map data
 - (If yes): Can you provide a link to this information? _____
 - (If no): If not, is there a third-party site for this information? _____
- (If yes): Does the parish GIS system allow members of the public to see their flood risk?
Y/N
 - (If yes): Can you provide a link to this information? _____
 - (If no): If not, is there a third-party site for this information? _____

2. Please complete the following table to the best of your ability.

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|----------------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Aerial photographs/imagery | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Hydrologic soils | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Contour layer | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|---|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Existing conditions land use and/or landcover | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Future planned land use | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Floodway delineation | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

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|------------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Floodplain delineation | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Inventory of dams | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Inventory of levees | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|--|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Inventory of floodgates | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Inventory of pump stations | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Inventory of detention facilities/impoundments | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|-------------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Inventory of canals | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Historical flood losses | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Precipitation data | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|---------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Temperature data | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Streamflow data | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Flood complaint log | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|---------------------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Flood loss / impacts by address | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Depth of flooding | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Duration of flooding | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|--|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Impervious surface inventory | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Built asset inventory (i.e. residential structures, non-residential structures, critical assets) | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Advisory Base Flood Elevation (ABFE) maps/data | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

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|----------------------------|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Elevation certificates | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Finished floor surveys | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Repetitive loss properties | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

| | Does your parish collect this information? | Where is the data stored? | What is the data format? | Is metadata available? | Please provide the classification or type available, if applicable. | What year was the data last updated? | What is the collection interval for this data? | Is the data publicly available? | Is there a data maintenance and update plan in place? | Location or coverage | Known issues with data? |
|---|---|---|--|---|---|--------------------------------------|--|---|---|--|--|
| Environmentally sensitive areas | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |
| Areas of Environmental Concern (AECs) in the coastal zone | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Online/Cloud Service <input type="checkbox"/> Parish or Municipal Server <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Shapefile or Feature Class <input type="checkbox"/> AutoCAD DWG <input type="checkbox"/> PDF, JPEG, or Other Non-Georeferenced File Format <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Data is not collected on a recurring basis <input type="checkbox"/> 5 to 10 years <input type="checkbox"/> 2 to 5 years <input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Entire Parish <input type="checkbox"/> Specific Cities or Neighborhoods [please specify] <input type="checkbox"/> Specific Natural Features (i.e., rivers, streams, watersheds) [please specify] <input type="checkbox"/> Other [please specify] | <input type="checkbox"/> Incomplete dataset <input type="checkbox"/> Out-of-date <input type="checkbox"/> Other [please specify] |

3. Does your parish need any *technical* assistance to obtain or manage data or information? Y/N

If so, please check all data or information types for which you need technical assistance to obtain or manage:

- ☐ Aerial photographs/imagery
- ☐ Hydrologic soils
- ☐ Contour layer
- ☐ Existing conditions land use and/or landcover
- ☐ Future planned land use
- ☐ Floodway delineation
- ☐ Inventory of dams
- ☐ Inventory of levees
- ☐ Inventory of floodgates
- ☐ Inventory of pump stations
- ☐ Inventory of detention facilities/impoundments
- ☐ Inventory of canals
- ☐ Historical flood losses
- ☐ Precipitation data
- ☐ Temperature data
- ☐ Streamflow data
- ☐ Flood complain log
- ☐ Flood loss/impacts by address
- ☐ Depth of flooding
- ☐ Duration of flooding
- ☐ Impervious surface inventory
- ☐ Built asset inventory (i.e, residential structures, non-residential structures, critical assets)
- ☐ Advisory Base Flood Elevation (ABFE) maps/data
- ☐ Elevation certificates
- ☐ Finished floor surveys
- ☐ Repetitive loss properties
- ☐ Environmentally sensitive areas
- ☐ Areas of Environmental Concern (AECs) in the coastal zone
- ☐ Other _____
- ☐ N/A

4. Does your parish need any *financial* assistance to obtain or manage data or information? Y/N

If so, please check all data or information types for which you need financial assistance to obtain or manage:

- ☐ Aerial photographs/imagery
- ☐ Hydrologic soils
- ☐ Contour layer
- ☐ Existing conditions land use and/or landcover
- ☐ Future planned land use
- ☐ Floodway delineation
- ☐ Inventory of dams
- ☐ Inventory of levees
- ☐ Inventory of floodgates
- ☐ Inventory of pump stations
- ☐ Inventory of detention facilities/impoundments
- ☐ Inventory of canals
- ☐ Historical flood losses

- Precipitation data
- Temperature data
- Streamflow data
- Flood complain log
- Flood loss/impacts by address
- Depth of flooding
- Duration of flooding
- Impervious surface inventory
- Built asset inventory (i.e, residential structures, non-residential structures, critical assets)
- Advisory Base Flood Elevation (ABFE) maps/data
- Elevation certificates
- Finished floor surveys
- Repetitive loss properties
- Environmentally sensitive areas
- Areas of Environmental Concern (AECs) in the coastal zone
- Other _____
- N/A

5. Please provide the following information on your parish's existing Light Detection and Ranging (LIDAR) data:

- ☐ Parish performs LIDAR survey
- ☐ Parish uses USGS LIDAR data
- ☐ Parish uses other publicly available LIDAR data
- ☐ Parish does not utilize any LIDAR data

What is the level of quality (as defined by the USGS LIDAR Base Specification document)?

☐ QL0

☐ QL1

☐ QL2

☐ QL3

Please provide data coverage:

- ☐ Entire Parish
- ☐ Specific Cities or Neighborhoods [please specify]
- ☐ Specific Natural Features (i.e., rivers, streams, watersheds) [please specify]
- ☐ Other [please specify]

Do you manage the data? Y/N

Is there a plan to update the data in the future? Y/N (If yes) Please explain:

What is the vertical accuracy?

- ☐ 0.05 m
- ☐ 0.10 m
- ☐ 0.20 m

☐ Other [please specify]

What is the horizontal resolution?

☐ 0.5 m

☐ 1 m

☐ 2 m

☐ Other [please specify]

What year were the data collected and processed? _____

Are there known problems with the data?

☐ Incomplete dataset

☐ Quality control issues

☐ Out-of-date

☐ Other [please specify]

6. Does your parish archive waterbody (rivers, streams, lakes, and reservoirs) flow, stage, or pool level data other than those publicly available from USGS, NOAA, USACE, or CRMS stations?
Y/ N

(only comes up with a yes) Where are these data located

(only comes up with a yes) Where are their respective periods of record?

Start Date: Click or tap to enter a date.

End Date: Click or tap to enter a date.

(only comes up with a yes) At what time interval are the data collected or archived?

- ☐ Data is not collected or archived on a recurring basis
- ☐ Annually
- ☐ Semi-annually
- ☐ Monthly
- ☐ Other [please specify]

(only comes up with a yes) Are there known problems with the data?

- ☐ Incomplete dataset
- ☐ Quality control issues
- ☐ Out-of-date
- ☐ Other [please specify]

7. Does your parish operate hydraulic structures, including stormwater pump stations, flood gates, or spillways? Y/ N

(only comes up with a yes) Are there documented operating, maintenance, and inspection plans?

- ☐ Yes, for major structures, but not all structures
- ☐ Yes for all (or almost all) structures
- ☐ No

(only comes up with a yes) Are operational data at hydraulic structures (e.g., inflows, outflows, and/or elevations/stages) collected and archived?

- ☐ Yes, for major structures, but not all structures
- ☐ Yes for all (or almost all) structures
- ☐ No

(only comes up with a yes) Are as-built drawings and updated surveys of hydraulic structures maintained?

- ☐ Yes, for major structures, but not all structures
- ☐ Yes for all (or almost all) structures
- ☐ No

8. Does your parish maintain RiverCams to photograph conditions in rivers, streams, and canals?
Y / N

9. Does your parish collect and/or cooperate with your regional USGS office to document and survey high water marks during and/or following flood events? Y / N

10. If your parish participates in the National Flood Insurance Program, do you keep Flood Insurance Studies and supporting field surveys, hydrology and hydraulic studies, and mapping yourselves? Y / N

(only comes up with a no) If not, do you rely on FEMA or another entity to keep this data? Y/N

(only comes up with a yes) Please specify entity: _____

11. Please answer the following questions about your parish's National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRMs)

When was the last time your parish's FIRMs were updated? (mm/dd/yyyy) _____

Do you believe your parish's FIRMs are accurate? Y/N

Is there sufficient data available for your parish's FIRMs? Y/N

If no to either of the above, please explain: _____

Does your parish currently have the information it needs to effectively understand FIRMs? Y/N

If no, please explain: _____

12. Does your parish currently have the information it needs to effectively understand future coastal flood risk as defined in the Louisiana Coastal Master Plan?

If no, please explain: _____

13. Does your parish have any entities (e.g., levee boards, river commissions) that could assist with data collection, operation, and maintenance of gauges? Y / N

(only comes up with a yes) Please describe: _____

14. Please list floodplain-related studies and modeling that have been completed within your parish over the last 5 years of which you are aware. For example, please include things like Advisory Base Flood elevation (ABFE) studies, studies commissioned by the parish, regional studies completed by the state or academia, current vs. future conditions studies, future population distribution studies, etc. Type "N/A" in any boxes for which you do not have information.

| | Date | Study title | Description | Information accessible? | Link to the study | Any relevant notes |
|---------|------|-------------|-------------|---|-------------------|--------------------|
| Study 1 | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |

| | | | | | | |
|---------|--|--|--|---|--|--|
| Study 2 | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Study 3 | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Study 4 | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Study 5 | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |

15. What are your parish's existing IT capabilities and capacity for data collection, management, and maintenance needs?

- ☐ No capacity
☐ Partially meets current needs
☐ Entirely meets or exceeds the parish's current needs, but not expected future needs (3-5 years)
☐ Entirely meets or exceeds the parish's current and expected future needs (3-5 years)

Please explain:

16. What is your parish's capacity to maintain and make readily available NFIP-related studies, maps, and other information?

- ☐ Does not meet current needs
☐ Partially meets current needs
☐ Entirely meets or exceeds the parish's current needs, but not expected future needs (3-5 years)
☐ Entirely meets or exceeds the parish's current and expected future needs (3-5 years)

Please explain:

17. What is your parish's capacity to maintain and make readily available CRS Credit documentation?

- ☐ Does not meet current needs
☐ Partially meets current needs
☐ Entirely meets or exceeds the parish's current needs, but not expected future needs (3-5 years)
☐ Entirely meets or exceeds the parish's current and expected future needs (3-5 years)

Please explain:

18. Does your parish need any support related to the data categories described above?

Please check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Staff Resources | <input type="checkbox"/> Funding Resources |
| <input type="checkbox"/> Technical Expertise | <input type="checkbox"/> Data Management Expertise |
| <input type="checkbox"/> Data Storage | <input type="checkbox"/> Data Analysis Expertise |
| <input type="checkbox"/> Data Gathering Expertise | <input type="checkbox"/> Other _____ |

19. What are the ideal features of a state or regional website / IT system that would support the implementation of nonstructural mitigation projects, floodplain management, or participation in the CRS rating system?

- | | |
|---|---|
| <input type="checkbox"/> Data portal / data library | <input type="checkbox"/> Flood risk engagement and communication materials |
| <input type="checkbox"/> Library for best practices and standards | <input type="checkbox"/> Training materials and curricula |
| <input type="checkbox"/> Links to related websites and resources | <input type="checkbox"/> Funding information / links to sources |
| <input type="checkbox"/> Online decision tools | <input type="checkbox"/> Joint funding application portal for multiple sources based on project needs |
| <input type="checkbox"/> State / regional engagement calendar | |
| <input type="checkbox"/> Mapping tools | |
| <input type="checkbox"/> Grant management portal | |
| <input type="checkbox"/> Other _____ | |
| <input type="checkbox"/> Other _____ | |

20. Please indicate the extent to which the topics covered in this Section represent a current / near-term priority for your parish

- ☐ Not a priority
- ☐ Some importance but not a priority
- ☐ Important and a priority
- ☐ A fundamental and critical priority

21. How confident are you that your responses in this Section accurately reflect your parish's status?

- ☐ Not confident
- ☐ Some confidence with a few parties consulted and a minimum of broad consensus
- ☐ Confident with a moderate level of consensus that reflects perspectives across the parish
- ☐ Very confident with a wide variety of parties consulted or review of documentation

Please share anything else you think we should know related to this topic:



Coastal Protection and Restoration Authority
150 Terrace Avenue, Baton Rouge, LA 70802 | coastal@la.gov | www.coastal.la.gov

FLOOD RISK AND RESILIENCE PROGRAM

Appendix B: Interview



Report: Version I

Date: August 2018

Prepared By: Carly Foster, Annis Saniee, and James Cottone

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List of Abbreviations

| | |
|-------|---|
| ASCE | American Society of Civil Engineers |
| BCA | Benefit-Cost Analysis |
| CAC | Community Assistance Contact |
| CAV | Community Assistance Visit |
| CFM | Certified Floodplain Manager |
| CFR | Code of Federal Regulations |
| CPRA | Coastal Protection and Restoration Authority |
| CRS | Community Rating System |
| CUPP | College/Underserved Community Partnership Program |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| GIS | Geographic Information System |
| H&H | Hydrology and Hydraulics |
| LIDAR | Light and Detection Ranging |
| LMI | Low to Moderate Income |
| LOMR | Letter of Map Revision |
| MPO | Metropolitan Planning Organization |
| NFIP | National Flood Insurance Program |
| RFP | Request for Proposal |
| RL | Repetitive Loss |
| SI/SD | Substantial Improvements/Substantial Damage |
| SOP | Standard Operating Procedure |
| SRL | Severe Repetitive Loss |

1.0 Introduction

As part of the Parish Flood Risk and Resilience Capability and Capacity Assessment, a series of 1.5-hour semi-structured phone interviews were conducted to gather opinions and obtain more detail. The team developed interview questions to complement the contents of the online survey and to provide further qualitative depth to the topics covered in the survey. Questions included in the interviews were more opinion-based than those included in the survey and, therefore, considered to be better communicated and understood through open dialogue. The interviews opened with an overarching introduction to CPRA's Flood Risk and Resilience Program and the Louisiana Watershed Initiative followed by 25 scripted questions. Questions were related to six topic areas including: Staff, Funding, Flood Damage Prevention Policies and Programs, Communication, External Relations, and Data Gathering and Maintenance. Interviewees received interview questions in advance, and many came prepared with written answers which allowed further discussion and inquiry.

A series of common themes emerged throughout the interview process as participants often expressed similar concerns and potentially useful solutions. This Appendix contains a count of the most prominent themes which came up in dialogue with the parishes, as well as how frequently they were mentioned across parishes. Themes are organized into the seven key topic areas that structured the discussion of preliminary results during the subsequent workshop. These topic areas are based on the topic areas from the original interview questions (Staffing, Funding, Policies, Communication, External Relations, and Data). "Communication" was revised to "Education," "External Relations" to "Coordination," and a new topic area was added: "Projects."

The key issues concerning parishes are compiled in Section 2.1, Challenges Identified by Parishes. Participants also suggested a variety of potential solutions to address capacity and capability-related challenges they face. The list of parish-proposed solutions is included in Section 2.2, Solutions Suggested by Parishes.

The complete list of interview questions, as distributed to parishes prior to the interviews, is included in Section 3.0, Interview Questions.

2.0 Interview Results

2.1 Challenges Identified by Parishes

Over the course of the interviewing process, it became clear that many parishes share similar challenges affecting their capacities and capabilities to pursue flood risk resilient projects, programs, and policies. The assessment team consisting of CPRA and Arcadis staff maintained a running list of key challenges raised by participants, noting the frequency, by parish, with which they came up. Nuance was added to reflect variations on similar challenges in different parishes. This process led the team to revise the original survey and interview topic areas to better reflect feedback from participants. The list of challenges which emerged from the interviews served as the foundation of the assessment workshops, reflected on the workshops posters (see Appendix C, 2.1 and 6.0). They are organized based on the finalized version of topic areas (Staffing, Funding, Projects, Policies, Education, Coordination, Data).

Table 1: Challenges Identified by Parishes

| TOPIC AREA | WHAT WE HEARD | FREQUENCY (number of parishes) |
|------------|---|--------------------------------------|
| Staff | Parishes have too few staff, too many responsibilities | 13 |
| | In-house staff experience/knowledge gaps <ul style="list-style-type: none"> • Grant management • Procurement • Financial monitoring • Technical/engineering expertise • Floodplain management • University students not coming in ready • Difficult to attract experienced people due to lack of funding | 7 |
| | Contractors may lack necessary capabilities and local knowledge | 3 |
| | Contractors have a vested interest in ongoing employment <ul style="list-style-type: none"> • Contractors not transferring knowledge/supporting capability building creates a relationship of dependency | 2 |
| | Contractors may lack financial capacity | 1 |

| TOPIC AREA | WHAT WE HEARD | FREQUENCY (number of parishes) |
|------------|--|--------------------------------------|
| Funding | Funding time horizons do not align with need <ul style="list-style-type: none"> • Need for mitigation funding during recovery process • Need for mitigation funding coincident with other renovations (e.g., during substantial improvements (SI)) | 15 |
| | Complicated program applications and management processes can be a barrier to entry | 15 |
| | Unaffordability of local match for property owners | 13 |
| | Uninsured people at risk and/or being priced out of their homes | 10 |
| | Raising revenue locally is a challenge | 2 |
| | Lack of trust in where funding is going | 1 |
| Projects | Eligibility requirements do not align with the need <ul style="list-style-type: none"> • Prioritization of repetitive and severe repetitive loss (RL/SRL), low to moderate income (LMI) • Project types may not match need, e.g., mitigation reconstruction, elevators for residential elevations, alternative housing during nonstructural projects • Grandfathering trap – have not technically flooded; do not fit into current funding programs | 10 |
| | Structural, drainage, and natural barrier projects are higher priority than nonstructural projects | 9 |
| | Various concerns about voluntary acquisitions <ul style="list-style-type: none"> • Causes “checkerboarding”/inequities • Reduces tax base • Cost of maintenance | 8 |
| | Various concerns about non-residential floodproofing <ul style="list-style-type: none"> • Effectiveness • Staff capacity to implement/maintain | 5 |
| | Liability of working with private property | 3 |

| TOPIC AREA | WHAT WE HEARD | FREQUENCY (number of parishes) |
|------------|---|--------------------------------------|
| Policy | Inadequate regulations in the parish <ul style="list-style-type: none"> Weak building codes re: renovations Land use does not incorporate future risk Flood damage prevention ordinance Residual levee risk Stormwater requirements Requirements to maintain standards once land is developed Encroachment in the floodway Challenges to implementing freeboard | 14 |
| | Political opposition to higher standards <ul style="list-style-type: none"> Builders and developers do not want to elevate Public pressure due to costs of implementation (particularly SI/SD) | 14 |
| | Enforcement challenges <ul style="list-style-type: none"> Substantial improvements/substantial damage Permitting and monitoring unpermitted activities Building codes, zoning, and floodplain ordinances Maintaining standards post development (e.g., drainage capacity) Enforcement of the National Flood Insurance Program (NFIP) | 6 |
| | Permitting or legislative requirements could be outdated/not meet the needs associated with the current flood risk | 6 |
| | Maintenance of waterways within state responsibility | 1 |
| Education | Misconceptions of economic impact of higher standards <ul style="list-style-type: none"> Among elected officials, developers, and realtors, etc. | 5 |
| | Fear and a sense of powerlessness <ul style="list-style-type: none"> "Rainxiety" – people get anxious every time it rains | 2 |
| | Complacency and a false sense of security | 2 |
| | Lack of consensus around flood risk | 2 |
| | Mistrust of government | 2 |

| TOPIC AREA | WHAT WE HEARD | FREQUENCY (number of parishes) |
|--------------|---|--------------------------------------|
| Coordination | Insufficient regional cross-coordination <ul style="list-style-type: none"> • Insufficient regional drainage coordination • Land use planning, infrastructure planning, project planning • Need for more CRS User Groups • Need for regionally-based project grants | 16 |
| | Siloed parish departments/lack of communication and knowledge sharing | 4 |
| | Lack of state coordination across state agencies or with local jurisdictions <ul style="list-style-type: none"> • Not adhering to local ordinances when developing or implementing projects • Failure to recognize watershed/downstream impacts of activities • Coastal flood modeling does not consider inland contributors to flood risk along the coast | 4 |
| | Insufficient cross-coordination between jurisdictions <i>within</i> the parish | 2 |
| | Trans-boundary issues with other states | 2 |
| Data | Inadequate GIS, modeling, and data <ul style="list-style-type: none"> • GIS system • LiDAR • Watershed-based data • Rain gauges/rainfall/stormwater data • H&H studies • Stream gauges • Groundwater data | 13 |
| | Inaccessibility of existing data | 5 |
| | Inaccuracy and inadequacy of FEMA FIRMs | 4 |

2.2 Solutions Suggested by Parishes

In addition to identifying challenges, interview participants brainstormed a variety of unique potential solutions their challenges. These solutions were framed as suggestions for what the State could do to help parishes build capacity and capability and served as the foundations for the strategies and optional approaches recommended in this report. A condensed list of the following was also included on the workshop posters (see Appendix C, 6.0).

Staffing

- Further vet the list of State-approved contractors for capacity (adequate staff, financing, and technical expertise) and credit to prevent unsuccessful projects
- Spearhead an apprenticeship program with universities and parishes
 - Something like the College/Underserved Community Partnership Program (CUPP) to leverage higher education in the state
- Provide a pool of technical resources (e.g., engineering, scientific) readily available at the state/regional level for deployment - a "task force" or "temp agency"
 - Send state personnel that could be embedded in the parishes
 - Someone coming more frequently than a CAV or CAC for support - need regular training for all officials
 - Provide appropriate training for inspectors
 - Provide training for real estate appraisers to consider flood safety (using standardized equations)
 - Provide technical support for field enforcement
 - Provide LOMR assistance for homeowners (post-FIRM update, for those trapped in grandfathering)
 - Provide accounting/procurement support

Funding

- Develop program to support rapid elevation after flooding
 - For example, regional authority (e.g., MPO) doing a regional elevation grant across multiple parishes to more effectively pool the risk (better BCAs)
- Provide state micro-loans to support small businesses
- Provide funding to help people get into compliance (if they are violations)
 - Possibility for a regulation that requires compliance before selling
- Provide match support, e.g., on a sliding scale
- Use a millage rate as a best practice, or shave a millage from another vested interest
- Provide dollar-for-dollar match, with flexibility - perhaps used to build resilience into planned capital improvements
 - Reward higher standards
 - Pay appraisal plus xx% to acquire flood-prone properties (RL, SRL, in the floodway, pre-FIRM)
- Provide housing finance incentives - allow people to purchase and get better terms of their loans outside the flood zone (better interest rate, etc.)
 - Provide down payment assistance
- Provide optional funding for a lower threshold of substantial improvement in building code (e.g., bucket of funding for increased cost of compliance)
- Provide tax credits at the state level (e.g., sales tax credit) for commercial development (retrofitting, permeable parking lots, etc.)
- Provide funding alongside repairs - incentivize lower cumulative threshold

- Provide good faith funding - rewarding parishes for investment

Projects

- Work with parishes to modify the definition of nonstructural flood risk reduction projects
- Fund for elevators alongside residential elevations (potential for partnering with nonprofits)
- Reduce LMI requirements to support project implementation
- Fund mitigation of structures outside the levee system
- Create and disseminate uniform RFP templates and streamlined application processes
 - Standard operating procedures (SOPs) for elevations
 - More comprehensive guide to eligibility
 - State standardization of different elevation projects
- Allow eminent domain for critical areas (e.g., checkerboarded land that would benefit many people if four homes were acquired)
- Normalize BCA values associated with different project types
- Expedite permitting for specific project parameters
 - Provide help getting a coastal use permit, technical assistance figuring out what the various agencies involved are comfortable with

Policy

- Provide a State-approved list ranking developers based on use of best practices and/or history of flood-prone development
 - Create state standards to employ businesses that utilize best practices
- Advocate or lobby to re-evaluate/update the Code of Federal Regulations (CFR)
 - "If you're allowed to build this building in a floodplain, you have to provide annual maintenance records"
 - Post-permit unpermitted activities
 - Higher standards - have the CFR automatically adopt ASCE updates (and state)
 - Undertake a study to prove need for higher standards
- Obey the ordinances of the locals, adhere to higher standards
 - Set a good example, get more CFMs involved
 - Let locals review state construction
 - Establish a state model ordinance for maintenance requirements
 - Ensure state investments/projects/properties meet higher standards
 - Build resilience into state projects (e.g., state highways)
 - Build retention into state projects
 - Provide guidance rather than requirements
- Evaluate parish codes/regulatory regimes and make targeted resilience recommendations
 - Review all capital improvement plans for resilience-tweaking opportunities and floodplain management implications
 - Maintain a running list of project priorities that can be used during recovery
 - Review projects to ensure they don't negatively impact the watershed
- Establish statewide freeboard for only new construction or tacked onto something that already has a substantial budget
 - Freeboard hurts people who are substantially damaged and just trying to get back into their house
- Provide guidance on stormwater retention standards
- Create a best practices 'library' for communities
- Establish a statewide limit on fill (incentives, standards, or through freeboard)

- Engage councilmen
- Fund or undertake a publication/study: what are the most effective incentives? (Including non-financial)

Education

- Fund outreach and education activities (not just for general public but also for developers/real estate community, elected officials)
- Provide one-on-one counseling: a local site-specific program and case-worker program to help people mitigate their properties
 - Interpreting Master Plan maps; showing people their insurance premium savings; having visuals on hand (different foundation types, etc.)
 - Simple visuals
 - 1-pagers on FEMA materials/materials on construction methods
 - Workshops for homeowners
 - Workshops for builders/developers
 - Workshops for elected officials
 - Workshops for utilities, service providers
 - Link with everything flood-related "wayfinder"/portal
- Develop a program to help people monitor the implementation of drainage projects
 - Will help them get more involved if they see what efforts are underway
- Assist in direct mailing to property owners based on RL lists
- Disseminate information about the importance of carrying flood insurance for homeowners
- Launch a website with links on what to do related to flood risk reduction, and clear/transparent value propositions (e.g., insurance cost reduction with elevation/freeboard; short and long-term payback; BCAs)
 - Communicate the value of policies
- Communicate unified messaging
 - More immediate language than "100, 500-year"
- Provide technical assistance to homeowners so they can reach out about insurance to someone who can go review everything, make sure their home is being rated correctly, and provide of proper documentation
- Keep in touch with parish contacts on progress of these initiatives. Keep them in the loop and continually engaged

Coordination

- Establish a state method of holding other agencies/entities accountable for their cross-jurisdictional flood risk related impacts
- Assist in coordinating CRS user groups
- Facilitate quarterly meetings at the watershed level
 - Bring agencies together
- Support the coordination of regional drainage and drainage districts at the watershed level
- Fund or undertake regional watershed studies statewide
 - Integrate watershed data into the next Master Plan
- Investigate a statewide drainage initiative for drainage infrastructure
 - Identify critical areas
 - Pursue uniform legislation - downstream effects of development
 - Address accountability/enforcement, e.g., unaccounted-for impervious runoff
 - Take a watershed-based approach with a unified methodology

Data

- Provide technical modeling/mapping assistance
 - Rainfall data, models around rainfall-related risk
 - Statewide rain gauge initiative - linked with GIS system
 - Groundwater data
 - Watershed-based data collection
 - Review of projects to ensure projects don't negatively impact the watershed
 - Hydraulic studies
 - Hydrologic surveys/re-evaluation of the storage capacity of existing detention and retention ponds
 - Stream gauges
 - Identify main waterways and their conditions, critical areas for waterway storage restoration (map)
- Provide statewide LiDAR and centralized GIS system
- Provide a software/database that provides transparency on where everything is at in the system
 - Make it user-friendly
 - For inspections, schedule, payments, invoice review, and scope alignment
 - Improved electronic system to show info re: elevation certificates, LOMAs, etc.
 - High water marks, historical loss information
 - An open source and accessible website/portal, readily available to translate to residents what flood risk means for them
 - Some kind of "wayfinder" for communities
 - Property specific look-up: see what is relevant to them
 - Information about importance of flood insurance
 - Accurate numbers of at-risk properties
 - Consolidated flood risk data collected from others or tracking system to unify information from multiple agencies
 - Re-evaluate privacy information around flood risk to make it more accessible to those working to solve problems
 - Subsidence, sea level rise, and changes over time
 - Residential risk from levees
 - Also for developers/builders, because they need to understand their options before they start designing (e.g., reducing impervious surfaces on new development)
 - Potentially work with nonprofits to collect/disseminate data
 - Working through an unbiased third party helps politicians understand
- Create an office to check data or a technical support ombudsman at the state level
- Fund or undertake a statewide study of waterway profiles (hotspots for waterway storage restoration)
- Consolidate data on number of existing flood-prone properties across the state; provide data more accessibly to parishes
- Streamline or increase data-sharing to create consistent estimates of at-risk structures between different state and/or local agencies

3.0 Interview Questions

What follows is a complete version of what was sent to participants in the 24 parishes in preparation for the interviews. The handout consists of a brief introduction to the assessment and its context and includes all 25 questions structuring the interview, organized by topic and including general as well as closing questions.



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Interview Topics

Overview and Introduction

Introduction to the Project: Nonstructural mitigation projects funded through CPRA's Flood Risk and Resilience Program could include dozens, hundreds, or thousands of recommended residential elevations, residential voluntary acquisitions, or non-residential dry-floodproofing actions within a single geographic area, depending on the needs of the area. We hope to better understand the parish's existing capacity to implement nonstructural mitigation projects of similar scale and type. We are also interested in your capacity to implement and manage other flood risk mitigation project types, such as stormwater management and drainage improvements, for example. This understanding will help us to focus resources to support your parish and other parishes effectively and efficiently.

How we will use the information / how this connects to other efforts: We will share this information with the other Watershed Council agencies and will use this information to help focus resources over the next few years for the Flood Risk and Resilience Program. This effort is also a pilot for possible expansion to the rest of the state through the Watershed Council. We will never quote you directly without your permission and we will aggregate responses unless we can use the information to point to targeted support for your parish. All responses will be summarized and generalized.

Introductions to Attendees: Introduce all parties on the phone, set up expectations for how we're taking notes / using the information, make roles of all parties on the phone clear

General Questions

1. Before we get started, what are you hoping will be the outcome of this assessment?
2. Are CPRA's recommended nonstructural mitigation project types (non-residential floodproofing, residential elevation, and residential voluntary acquisition) aligned with the goals and priorities of your parish?
3. When implementing nonstructural mitigation projects in the past, what have been the primary challenges?
4. What do you think is the single most important issue your parish faces related to flood risk reduction (including, but not limited to, floodplain management, NFIP, planning for future development etc.)?

5. What one change, if implemented, would lead to the biggest improvement in flood risk reduction to the existing built environment in your parish?
 - o How could the state help the parish implement this change?
6. What one change, if implemented, would lead to the biggest improvement in reducing potential flood risk to future development or redevelopment in your parish?
 - o How could the state help the parish implement this change?

1.0 Staff

1. Have any nonstructural projects implemented in or by the parish been affected by unmet staffing or contract needs related to grants management and/or project implementation?
2. How do staff involved in nonstructural mitigation and floodplain management coordinate with staff in other parish departments related to:
 - a. Comprehensive/land use plans
 - b. Transportation planning
 - c. Other infrastructure planning
 - d. Capital improvement plans
 - e. What could be done to improve coordination?
3. Do any other entities, such as municipalities or non-profits, also implement non-structural and other flood risk reduction-related projects, or is this typically a parish responsibility?
 - a. Is there close coordination between the parish and said entity(ies) to develop project priorities or during project implementation?

2.0 Funding

1. Are there specific nonstructural mitigation project types or flood risk reduction activities that are chronically underfunded?
2. Is there a need for additional incentives/disincentives to further reduce flood risk beyond federal/state mitigation grants?
3. What mechanisms do you have in your jurisdiction to incentivize risk reduction? For example:
 - a. Zoning, subdivision regulations
 - b. Implementing/enforcing building codes
 - c. Transfer of Development Rights or other tax incentives, etc.
 - d. Can you suggest some additional mechanisms to achieve that goal?
4. Parishes across the state are often challenged to do more work with fewer resources. How does nonstructural mitigation planning and implementation fit in amongst other current or near-term parish budgetary constraints? For example, is this a low or high priority in comparison to other current or near-term initiatives?

3.0 Flood Damage Prevention Policies and Programs

1. How well do you think your parish is doing related to floodplain management (flood risk reduction to new development / redevelopment)?
 - a. What's working?
 - b. What's not working?
 - c. What are some things that are working so well you'd call them best practices?
2. Please describe the ideal role of the state in supporting effective floodplain management policies and programs in your parish. What do you think the state should be doing to help related to this topic?
3. How can the state best help to facilitate the parish's implementation of higher flood risk management standards? For example, with staff resources, financial incentives, stakeholder outreach, information that demonstrates how such standards will benefit the parish, etc.
 - a. From your perspective, would a statewide freeboard requirement be something that locals would want to see the State implement and work with communities to enforce?

4.0 Communication

1. What is the most effective way to make people aware of both current and future flood risk?
 - a. Potential follow on: What are the key messages to share and/or who are (or should be) the key messengers?
2. What is the most effective way to build public awareness and support for nonstructural flood risk reduction projects?
 - a. Potential follow on: What are the key messages to share and/or who are (or should be) the key messengers?
3. What is the most effective way to build public awareness and support for flood risk reduction policies?
 - a. Potential follow on: What are the key messages to share and/or who are (or should be) the key messengers?

5.0 External Relations

1. Do you have any success stories related to floodplain management or nonstructural project implementation that have been facilitated through active parish coordination with other external entities? This may include:
 - a. Neighboring parishes
 - b. Regional Planning Commission, Metropolitan Planning Organization
 - c. Academics, research institutes, extension agents
 - d. Private entities
2. What do you think the state should be doing to advance these types of interagency collaborations?

6.0 Data Gathering and Maintenance

1. What data would be most helpful if collected at the regional or state level?

7.0 Closing

1. Are there capacity or capability building programs that currently exist related to nonstructural project implementation, floodplain management, or other flood risk reduction programs? Should these programs be expanded? Modified? Redirected to other initiatives?
2. Is there anything we have not covered that you want to make sure we know / take into consideration?
3. Who else do you think we should be speaking with through future phases of this initiative?

The results of this interview will be used to benefit your parish. This information will help us to develop the state's approach to supporting capacity building strategies for coastal parishes and to inform decisions about allocating funding and technical resources.



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FLOOD RISK AND RESILIENCE PROGRAM

Appendix C: Workshop



Report: Version I

Date: August 2018

Prepared By: Carly Foster, Annis Saniee, and James Cottone

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List of Abbreviations

| | |
|-------|--|
| ASCE | American Society of Civil Engineers |
| BCA | Benefit-Cost Analysis |
| CPRA | Coastal Protection and Restoration Authority |
| CRS | Community Rating System |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| GIS | Geographic Information System |
| H&H | Hydrology and Hydraulics |
| ICC | Increased Cost of Compliance |
| LiDAR | Light Detection and Ranging |
| LMI | Low to Moderate Income |
| MOU | Memorandum of Understanding |
| NFIP | National Flood Insurance Program |
| PPT | PowerPoint |
| RL | Repetitive Loss |
| RFP | Request for Proposal |
| SRL | Severe Repetitive Loss |
| SI/SD | Substantial Improvements/Substantial Damage |

1.0 Introduction

As part of the Parish Flood Risk and Resilience Capability and Capacity Assessment, three, 3-hour multi-parish workshops were conducted to build group consensus around key challenges and potential solutions. The primary objectives were:

- 1) To confirm, discuss, and refine the findings from the interviews and online survey
- 2) To prioritize and build group consensus around key challenges
- 3) To develop and consolidate recommendations based on the identification of root-cause issues and possible solutions
- 4) To create a stronger set of peer relationships among parishes based on similar challenges, proximity, capacity, and/or shared goals and aspirations

The workshop agenda was structured to include the below activities:

- Presentation and discussion of preliminary findings, including challenges and solutions identified during the interviews and online survey
- A prioritization exercise, using preliminary findings (challenges and solutions)
- Small group break-outs to identify root causes to key challenges and brainstorm new solutions
- Presentation of small group findings and recommendations
- Consolidation of and building consensus around findings and recommendations

Based on the information participants provided through the interviews and the online survey, the team compiled a list of challenges shared in common amongst parishes as well as potential solutions suggested by participants. The workshop discussions and group activities were structured by the key challenges and potential solutions, which were presented on poster boards and broken up into seven categories. These categories were similar to those of the interview and online survey, but slightly modified during the course of pre-workshop processing and analysis. They included:

- Staffing
- Funding
- Projects
- Policy
- Education
- Coordination
- Data

The workshops involved a significant amount of open discussion and brainstorming. CPRA and Arcadis staff presented the key challenges and potential solutions, which were reviewed and further discussed by the participants. This discussion resulted in new challenges and solutions introduced by participants. For the complete list of challenges and solutions, see Section 2.0, List of Challenges and Solutions. Next, to further understand the most important challenges and solutions, attendees participated in two group exercises.

For the first exercise, participants were asked to prioritize challenges and potential solutions to those challenges, which had been identified during the interview, online survey, and earlier workshop discussion. Each attending parish staff member was provided with six blue stickers and six green stickers; participants were asked to use their stickers like dollars, “voting” for their highest priority challenges (blue stickers) and solutions (green stickers). See Figures 1 and 2 for examples of the prioritization exercise in action, and Figures 3 and 4 for examples of completed poster boards.

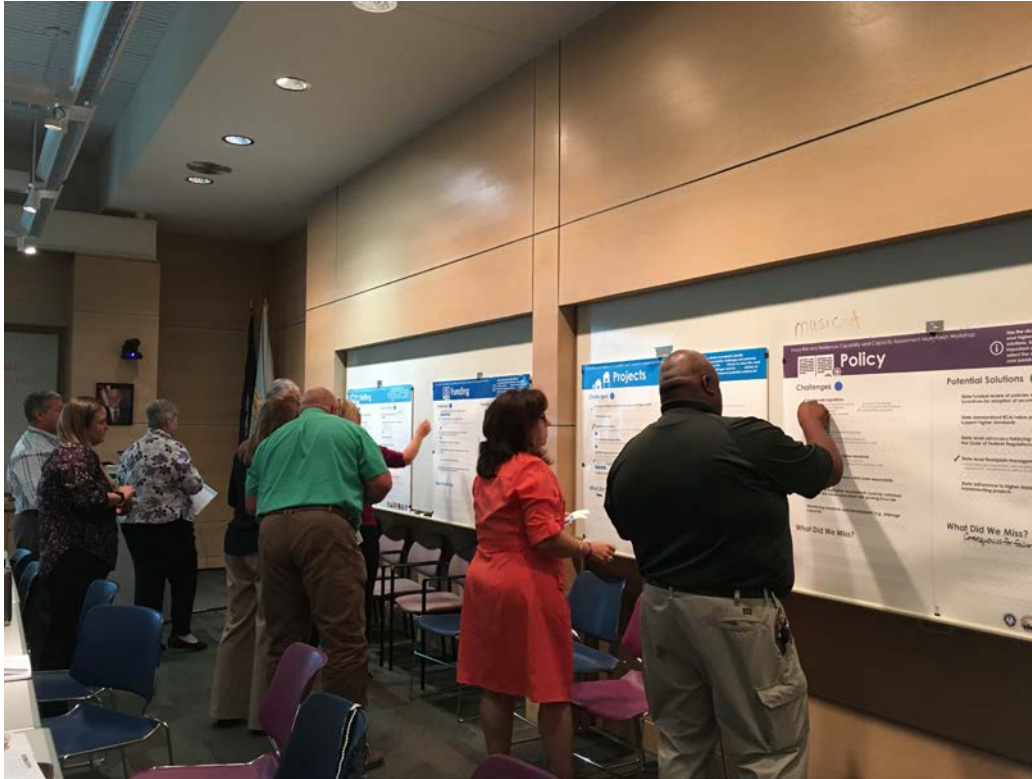


Figure 1: Workshop Participants Use Stickers to Prioritize Challenges and Potential Solutions (1)

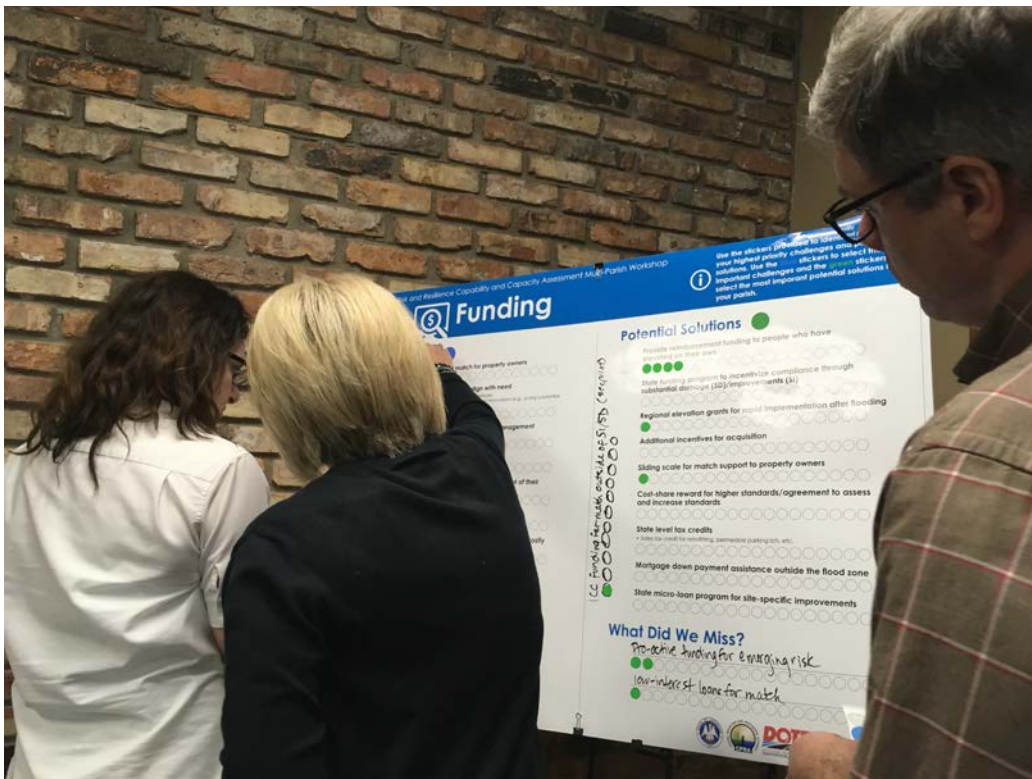


Figure 2: Workshop Participants Use Stickers to Prioritize Challenges and Potential Solutions (2)

Data

Use the stickers provided to identify your highest priority challenges and potential solutions. Use the **blue** stickers to select the most important challenges and the **green** stickers to select the most important potential solutions for your parish.

Challenges

- Inaccessibility of existing data
 - "It's not always clear what's out there"
- ✓ Inadequacy of existing data
 - GIS system
 - LIDAR
 - Built environment data
 - Rain gauges/rainfall/stormwater data
 - H&H studies
 - Stream gauges
 - Groundwater data
- ✓ Inaccuracy and inadequacy of FEMA FIRMs

What Did We Miss?

Regional models watershed

Potential Solutions

- State flood mapping program to clarify risk
- ✓ Work with nonprofits to collect and disseminate data
- Centralized GIS system
- Statewide LIDAR
- ✓ Regional housing of data for all areas within a watershed
- "Everything Flood Related" website to link to sources, other websites, and/or house data
- Unified standard operating procedures and quality control procedures for data collection

What Did We Miss?

Regional models watershed

Figure 3: Example Completed Poster Board from Prioritization Exercise (1)

Flood Risk and Resilience Capability and Capacity Assessment Multi-Parish Workshop

Policy

Use the stickers provided to identify your highest priority challenges and potential solutions. Use the **blue** stickers to select the most important challenges and the **green** stickers to select the most important potential solutions for your parish.

Challenges

- ✓ Inadequate regulations
 - Land use does not incorporate future risk
 - Residual levee risk management
 - Stormwater requirements
 - Requirements to maintain standards
- Enforcement
 - Substantial improvements/substantial damage
 - Unpermitted activities
 - Building codes, zoning, and floodplain ordinances
 - Enforcement of the National Flood Insurance Program (NFIP)
- Political opposition to higher standards
 - Builders and developers do not want to elevate
 - Public pressure due to costs of implementation (particularly \$/SD)
- Maintenance of waterways within state responsibility
- Permitting or legislative requirements could be outdated/not meet the needs associated with growing flood risk
- Maintaining standards post development (e.g., drainage capacity)

What Did We Miss?

Incentives not equal to disincentives

Potential Solutions

- State funded review of policies and regulatory regimes with incentives for adoption of recommendations
- State standardized BCA/value proposition publications to support higher standards
- State-level advocacy/lobbying to re-evaluate and update the Code of Federal Regulations (CFR)
- State-level floodplain management policies
 - State freeboard requirement, state floodway definition, state stormwater requirements, requirements to adhere to watershed plans, etc.
- State adherence to higher standards when developing or implementing projects

What Did We Miss?

Regional State adjudication process for enforcement

Figure 4: Example Completed Poster Board from Prioritization Exercise (2)

After the blue stickers were tallied, the three key challenges with the most votes formed the basis of the subsequent small group break-out discussions. The results of the prioritization exercise are in Section 3.0, Overall Results.

The break-out activity focused on investigating the root cause of three key challenges. In this exercise, each breakout group (consisting of 4-5 individuals) took on a more thorough investigation of one or more of these challenges. Through 45 minutes of brainstorming and dialogue, participants identified and formed consensus on the root causes of their challenge(s) and developed potential solutions to those root causes, including a delineation of state, local, and other actors' roles in implementation. Participants were asked to employ an iterative process of asking "why?" to distill one or more prioritized key challenges down to their root causes. See Figure 5 for a demonstration of how this process was facilitated. Completed versions of the break-out exercises are included in Section 4.0, Results of Small Group Break-Outs.

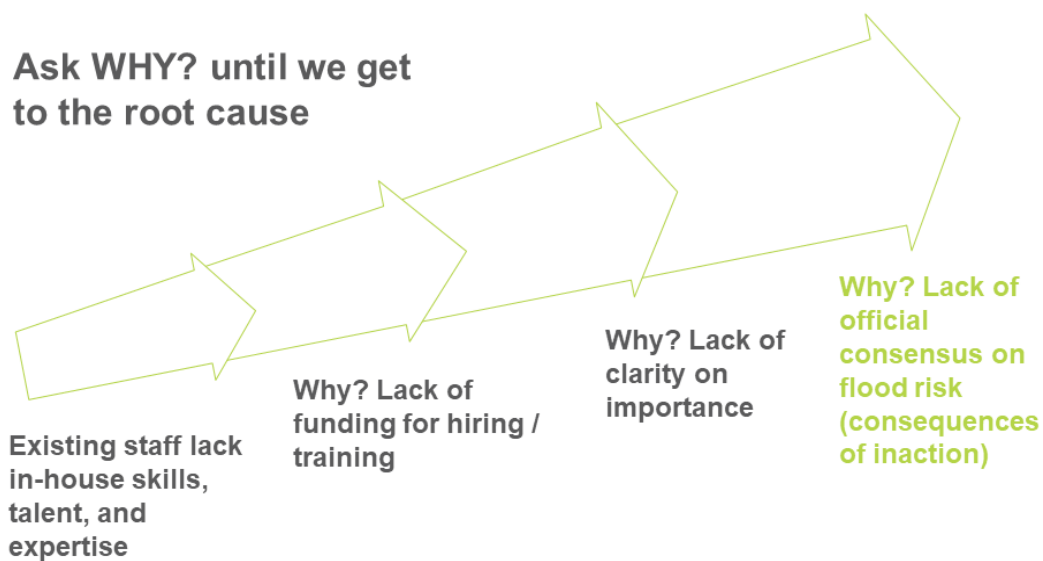


Figure 5: Break-Out Exercise Process

Lastly, the break-out groups reconvened and shared the results of their small group discussions (Figure 6). One final prioritization exercise was conducted to indicate attendees' preference for the one solution they believed could have the greatest impact statewide (one orange sticker). The results of the prioritization exercises, as well as the compilation of additional feedback received through the workshop discussions, parish interviews, and online survey form the basis of the final report.

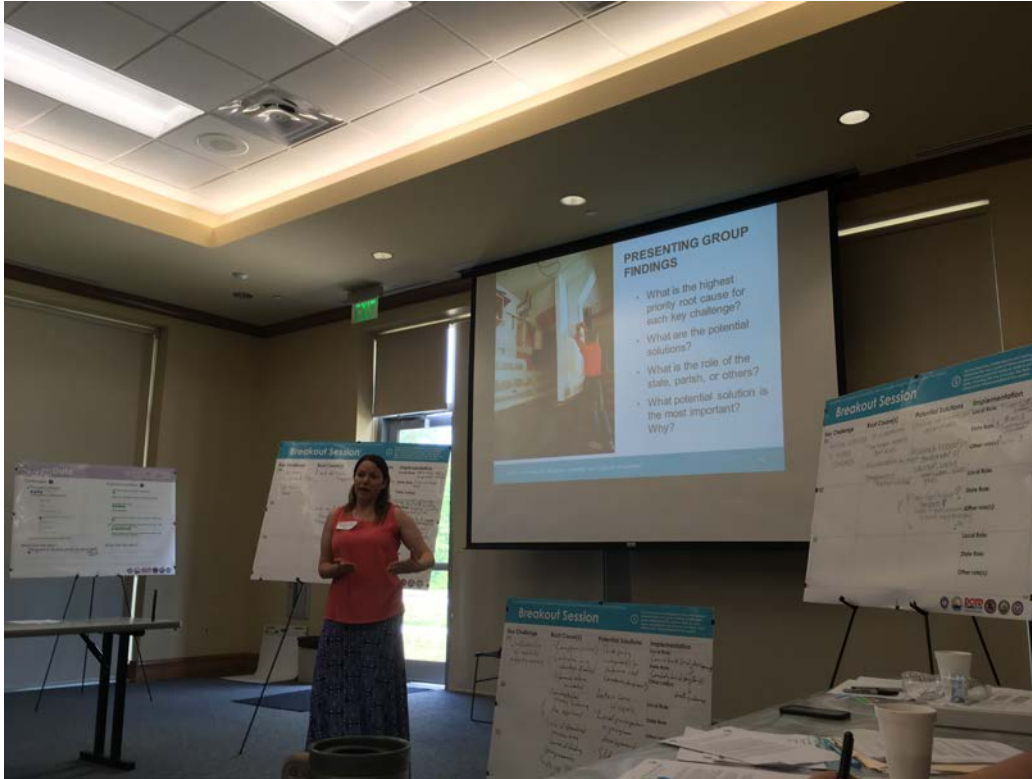


Figure 6: Workshop Participant Presents Findings from Break-Out Exercise

The workshop agenda and posters, including the seven topic boards and the small group break-out board, are located in Section 5.0, Workshop Agenda and Section 6.0, Workshop Posters, respectively.

2.0 List of Challenges and Solutions

2.1 Challenges Presented on Posters

Staffing

- Parishes have too few staff, too many responsibilities
- In-house staff experience/knowledge gaps
- Consultants may lack financial capacity
- Consultants may lack necessary capabilities and local knowledge
- Consultants not supporting capacity building

Funding

- Unaffordability of local match for property owners
- Funding time horizons do not align with need
- Complicated program application and management processes can be a barrier to entry

- Raising revenue locally is a challenge
- Uninsured people at risk and/or being priced out of their homes
- Lack of trust in where funding is going
- Elevation, acquisition, and floodproofing projects are costly compared to other regional solutions

Projects

- Structural, drainage, and restoration projects are higher priority
- Checkerboarding
- Residential acquisitions
- Non-residential floodproofing
- Eligibility requirements don't align with the need
- Liability of working with property owners

Policy

- Inadequate regulations
- Enforcement
- Political opposition to higher standards
- Maintenance of waterways within state responsibility
- Permitting or legislative requirements could be outdated/not meet the needs associated with growing flood risk
- Maintaining standards post development

Education

- Fear and sense of powerlessness
- Complacency and a false sense of security
- Lack of consensus around flood risk
- Mistrust of government
- Misconception of economic impact of higher standards
- Political will to enforce certain policies

Coordination

- Siloed parish departments/lack of communication and knowledge sharing
- Insufficient cross-coordination between jurisdictions *within* the parish
- Insufficient regional cross-coordination
- Lack of state coordination across state agencies or with local jurisdictions
- Trans-boundary issues with other states

Data

- Inaccessibility of existing data
- Inadequate GIS, modeling, and data
- Inaccuracy and inadequacy of FEMA FIRMs

2.2 Solutions Presented on Posters

Staffing

- Grant funding for additional local staff
- State or regional “temp agency” for local staff support
- Regional floodplain manager
- University apprenticeship program
- State-approved list of contractors that meet certain requirements

Funding

- Provide reimbursement funding to people who have elevated on their own
- State funding program to incentivize compliance through SI/SD
- Regional elevation grants for rapid implementation after flooding
- Additional incentives for acquisition
- Sliding scale for match support to property owners
- Cost-share reward for higher-standards/agreement to assess and increase standards
- State level tax credits
- Mortgage down payment assistance outside the flood zone
- State micro-loan program for site-specific improvements

Projects

- Requested new eligible costs
- Reduce RL and LMI requirements
- Allow use of eminent domain for critical areas
- Clear published guidance and standard operating procedures
- Templates (RFPs, forms, training PPTs)
- Unify state nonstructural program application/implementation processes wherever possible

Policy

- State funded review of policies and regulatory regimes with incentives for adoption of recommendations
- State standardized BCA/value proposition publications to support higher standards
- State-level advocacy/lobbying to re-evaluate and update the CFR
- State-level floodplain management policies
- State adherence to higher standards when developing or implementing projects

Education

- Outreach and education program for elected officials
- Outreach and education program for the general public
- Outreach to other key sectors including developers, home builders, and realtors
- “Everything Flood-Related” website to house all existing and planned support materials
- Best practices “library” from other parishes and states

Coordination

- State facilitated workshops to increase coordination
- State facilitation of MOUs
- State ranking system for evaluation of developers
- Local review mechanism for state construction
- Investigation into regulatory mechanisms to prevent cross-boundary adverse impacts

Data

- State flood mapping to clarify risk
- Work with nonprofits to collect/disseminate data
- Centralized GIS system
- Statewide LiDAR
- Regional housing of data for all areas within a watershed
- “Everything Flood Related” website to link to sources, other websites, and/or house data
- Unified standard operating procedure and quality control procedures for data collection

2.3 New Challenges Identified by Parishes

Staffing

- Contractor willingness to do projects (volume not there)
- Lack of personal investment of consultants
- State not taking responsibility, and pushing responsibility on locals
- State staff growing in size, but not responsibility
- Management of turnover at the state and local level

Funding

- “Missing middle” funding for nonstructural projects
- Lack of knowledge of how to generate funding
- Top-down decision-making; lack of trust in locals
- Retirement penalties for taking money out of accounts after flood events
- Contractors taking advantage of the market; too much overall reliance on the market for project funding

Projects

- Not allowed to use public funding on private property
- Desire for residential floodproofing

Policy

- Some requirements impossible to enforce in certain circumstances
- Lack of state support in enforcement (consistency and clear articulation of policies)
- Lack of state commitment to existing policy
- Incentives not equal to disincentives (i.e., more CRS points for fill)
- Priorities need to be clear

Education

- NFIP program requirements are difficult to understand
- Existing materials about flood risk are too complex
- Underestimations of flood risk
- Market doesn't yet recognize current/future flood risk
- Consequences of inaction are unclear

Coordination

- Apathy by the state
- Federal disconnect

Data

- Need better access to federal data
- Lack of consistent modeling
- Mismanagement of information provided by locals to state (what's happening to it?)

2.4 New Solutions Suggested by Parishes

Staffing

- Cross-training program
- Grant funding for additional local staff with less reporting requirements
- State-facilitated trainings and outreach to local staff
- Standard methods for project applications and grant management

Funding

- More proactive, predictable, and consistent funding for future flood risk
- Low-interest loans to provide match for property owners
- ICC funding for match outside of SI/SD
- Regional focused funding
- State funding of match
- Block grant model applied to flood risk reduction/resilience funding
- State actions to increase CRS credits (for outreach/education)
- Independent third-party to determine costs (for match); task force of experts
- Local participation in program development
- Dedicated, non-competitive multi-year (~5) funding stream for locals

Projects

- Acquisitions employed for broader public service only (e.g., open space preservation)
- Eligibility for funding for flood risk reduction/resilience of receiving areas
- Developing programs to match need, not vice-versa
- Allow for redevelopment in some cases (acquisition)

Policy

- Funding to support policy implementation (i.e., elevation funding, only enforce if still refuse)
- Consequences for failure to comply (e.g., home builders)
- Regional or state adjudication process for enforcement (larger state role for enforcement)
- Development of advocates amongst homebuilders, business groups

Education

- Education of all public servants on current/future flood risk
- Accessible “handbook” on flood risk reduction actions and mitigation options; consistent and accessible language/messaging around flood risk
- Online policy and project status transparency
- Outreach to other state agencies
- Outreach to finance institutions, insurance
- State leadership in outreach
- Education of state staff (project management/local issues)
- Resources/trainings for what individual property owners can do

Coordination

- Liaison staffing (parish and state)
- Regional coordinator
- Data driven regional planning
- State employee apprenticeship program
- Flood insurance commissioner advocacy (and other state agencies; ASCE)

Data

- State flood mapping with parish involvement
- Unified standard operating procedure and quality control procedures for data collection and evaluation, including models
- Regional flood mapping program
- State leadership in flood risk evaluation and communication
- Program attrition data gathering project
- Federal data sharing program
- Streamlined, watershed-based modeling

3.0 Overall Results

3.1 Top Challenges (Total, by Number of Priority Stickers Received)

- 22: Parishes have too few staff, too many responsibilities
- 20: Unaffordability of local match for property owners
- 19: Eligibility requirements don't align with the need (includes "missing middle" funding)
- 17: Lack of state support & political will to enforce certain policies, and other challenges with enforcement
- 12: Political opposition to higher standards
- 12: Lack of state coordination across state agencies or with local jurisdictions
- 10: Funding time horizons do not align with need
- 9: Structural, drainage, and restoration projects are higher priority
- 8: In-house staff experience/knowledge gaps
- 5: Insufficient regional cross-coordination
- 5: Rain gauges/rainfall/stormwater data
- 4: Residential acquisitions
- 4: Insufficient cross-coordination between jurisdictions *within* the parish
- 4: Inaccessibility of existing data
- 4: Inaccuracy and inadequacy of FEMA FIRMs
- 3: Consultants not supporting capacity building
- 3: Complicated program application and management processes can be a barrier to entry
- 3: Elevation, acquisition, and floodproofing projects are costly compared to other regional solutions
- 3: Complacency and a false sense of security
- 3: Lack of consensus around flood risk
- 3: Misconception of economic impact of higher standards
- 3: NFIP program requirements are difficult to understand
- 3: H&H studies
- 3: Need better access to federal data
- 2: Raising revenue locally is a challenge
- 2: State not taking responsibility/pushing responsibility on locals
- 2: Uninsured people at risk and/or being priced out of their homes
- 2: Non-residential floodproofing
- 2: Inadequate regulations
- 2: Permitting or legislative requirements could be outdated/not meet the needs associated with growing flood risk
- 2: Fear and sense of powerlessness
- 2: Siloed parish departments/lack of communication and knowledge sharing
- 2: Federal disconnect
- 1: Consultants may lack necessary capabilities and local knowledge
- 1: State staff growing in size, but not responsibility
- 1: Lack of trust in where funding is going
- 1: Some requirements impossible to enforce in certain circumstances
- 1: Lack of state commitment to existing policy
- 1: Market doesn't yet recognize current/future flood risk
- 1: Inadequate GIS, modeling, and data
- 1: GIS system
- 1: Mismanagement of information provided by locals to state (what's happening to it?)

3.2 Top Solutions (Total, by Number of Priority Stickers Received)

- 14: Grant funding for additional local staff (with less reporting requirements)
- 13: State-level floodplain management policies
- 13: Outreach to other key sectors including developers, home builders, and realtors
- 11: Provide reimbursement funding to people who have elevated on their own
- 11: "Everything Flood Related" website to link to sources, other websites, and/or house data, and to house all existing and planned support materials
- 9: Clear published guidance and standard operating procedures
- 9: Outreach and education program for the general public
- 8: Mortgage down payment assistance outside the flood zone
- 8: Regional elevation grants for rapid implementation after flooding
- 7: Funding to support policy implementation (i.e., elevation funding, only enforce if still refuse)
- 7: Outreach and education program for elected officials
- 6: State level tax credits
- 6: Investigation into regulatory mechanisms to prevent cross-boundary adverse impacts
- 6: Regional housing of data for all areas within a watershed / regional watershed models
- 5: ICC funding for match outside of SI/SD
- 5: Allow for redevelopment in some cases (acquisition)
- 5: Accessible "handbook" on flood risk reduction actions and mitigation options; consistent and accessible language/messaging around flood risk
- 5: Centralized GIS system
- 4: State or regional "temp agency" for local staff support
- 4: Sliding scale for match support to property owners
- 4: State flood mapping to clarify risk (with parish involvement)
- 4: More proactive, predictable, and consistent funding for future flood risk
- 3: University apprenticeship program
- 3: Requested new eligible costs
- 3: Templates (RFPs, forms, training PPTs)
- 3: Unify state nonstructural program application/implementation processes wherever possible
- 3: Developing programs to match need, not vice-versa
- 3: State standardized BCA/value proposition publications to support higher standards
- 3: Outreach to finance institutions, insurance
- 3: Regional flood mapping program
- 3: Program attrition data gathering project
- 3: Federal data sharing program
- 2: Regional floodplain manager
- 2: Reduce RL and LMI requirements
- 2: State funded review of policies and regulatory regimes with incentives for adoption of recommendations
- 2: Best practices "library" from other parishes and states
- 2: Flood insurance commissioner advocacy (and other state agencies; ASCE)
- 2: Unified standard operating procedure and quality control procedures for data collection and evaluation, including models
- 1: Cross-training program
- 1: State funding program to incentivize compliance through SI/SD
- 1: State micro-loan program for site-specific improvements
- 1: Low-interest loans for match

- 1: State actions to increase CRS credits (for education)
- 1: Consequences for failure to comply (e.g., home builders)
- 1: State leadership in outreach
- 1: Liaison staffing (parish & state)

3.3 Top Recommendations for Statewide Impact (Total, by Number of Priority Stickers Received)

- 4: Clear published guidance and standard operating procedures (2)/state procedure manuals (2)
- 3: Outreach and education program for elected officials
- 2: Block grant model applied to flood risk reduction/resilience funding
- 2: Grant funding for additional local staff with less reporting requirements
- 2: Mortgage down payment assistance outside the flood zone
- 2: State-level floodplain management policies
- 2: Outreach to other key sectors including developers, home builders, and realtors
- 2: Provide reimbursement funding to people who have elevated on their own
- 2: Address the inaccuracy and inadequacy of FEMA FIRMs
- 2: Address insufficient regional cross-coordination
- 1: "Everything Flood Related" website
- 1: State level tax credits
- 1: Rain gauges/rainfall/stormwater data
- 1: Streamlined, watershed-based modeling
- 1: State funding of match
- 1: More proactive, predictable, and consistent funding for future flood risk
- 1: Address unaffordability of local match for property owners
- 1: Develop programs to match need, not vice-versa

4.0 Results of Small Group Break-Outs

Below are several charts that capture the results of each of the break-out sessions across the workshops events. Participants brainstormed around one or more key challenges to better understand its root causes, potential solutions, and possible implementation strategies.

Table 1: Break-Out from Workshop Event #1

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|--|---|---|---|
| Too few staff with too many responsibilities | <ul style="list-style-type: none"> - Lack of public support to raise money - State delegates too much to locals without financial support | <ul style="list-style-type: none"> - Relaxed requirements in state-provided funding - Evaluation and communication about how current funds are spent - State funding that matches feedback/community needs - Community engagement and/or leadership program with handbook - Funding for population receiving areas | <p><u>Local Role:</u></p> <p><u>State Role:</u></p> <p><u>Other(s):</u></p> |

Table 2: Break-Outs from Workshop Event #2

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|--|--|--|--|
| Lack of state coordination across state agencies or with local jurisdictions | <ul style="list-style-type: none"> - Misunderstanding of the realities of where we live - Lack of consistent modelling - Lack of understanding of time horizons - Lack of clear value propositions | <ul style="list-style-type: none"> - Consistent messaging (state/federal) and outreach & education for elected officials - Streamlined, watershed-based modelling | <p><u>Local Role:</u></p> <ul style="list-style-type: none"> - Meeting minimum standards; internal coordination <p><u>State Role:</u></p> <ul style="list-style-type: none"> - Setting minimum standards <p><u>Other(s):</u></p> <ul style="list-style-type: none"> - Regional planning/coordination |
| Uncertainty of grant funding for local match (owner can't afford) | <ul style="list-style-type: none"> - Lack of knowledge of how to generate funding - How to prioritize funding | <ul style="list-style-type: none"> - State-funded match - Incentivize homeowner to make match vs. waiting for next disaster - Education of local officials to prioritize funding - Educate homeowners on long-term risk + realtors | <p><u>Local Role:</u></p> <ul style="list-style-type: none"> - Generate outreach materials <p><u>State Role:</u></p> <ul style="list-style-type: none"> - Provide funding, pre-disaster estimates <p><u>Other(s):</u></p> <ul style="list-style-type: none"> - NGOs to help educate locals & officials to provide funding (or private funding) - Private incentivization of employees to participate - Federal direct funding to parishes |

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|--|---|--|--|
| Eligibility requirements don't align with the need | <ul style="list-style-type: none"> - Top-down decision-making - Lack of trust in locals | <ul style="list-style-type: none"> - Block grant model applied to resilience funding - Projects implementing the "plan" should be eligible | <p><u>Local Role:</u></p> <p><u>State Role:</u></p> <ul style="list-style-type: none"> - Advocate for change, with federal programs - For state programs, develop state-funded program <p><u>Other(s):</u></p> <ul style="list-style-type: none"> - Federal |

Table 3: Break-Outs from Workshop Event #3

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|--|--|--|---|
| Unaffordability of match for property owners | - Corruption (political): <ul style="list-style-type: none"> Contractors taking advantage of market Too much reliance on the market | - Independent third-party to determine cost (academics or engineers?): <ul style="list-style-type: none"> Task force of experts | <u>Local Role:</u> - Ground truth (mid-development) <u>State Role:</u> - Pay for it! - Draft guidance <u>Other(s):</u> |
| | - Over-complicated process burdening the applicant: <ul style="list-style-type: none"> Lack of streamlined processes across sources of funding (programmatic issue) It's still political | - Local participation in program development - Sliding scale | <u>Local Role:</u> <u>State Role:</u> <u>Other(s):</u> |

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|--|--|---|--|
| Political opposition to higher standards | <ul style="list-style-type: none"> - It's inconvenient - Time horizon interests don't align - Misinformation and mistrust - Consequences of inaction unclear | <ul style="list-style-type: none"> - Funding pool to share cost of compliance | <u>Local Role:</u> <u>State Role:</u> <ul style="list-style-type: none"> - Funding <u>Other(s):</u> <ul style="list-style-type: none"> - Federal funding |
| | | <ul style="list-style-type: none"> - Outreach & education/development of advocates among homebuilders, business groups | <u>Local Role:</u> <ul style="list-style-type: none"> - Support coordination logistics <u>State Role:</u> <ul style="list-style-type: none"> - Tools, funding <u>Other(s):</u> |
| | | <ul style="list-style-type: none"> - State-level higher standards (make it more inconvenient to build inappropriately) | <u>Local Role:</u> <u>State Role:</u> <u>Other(s):</u> |

| KEY CHALLENGE | ROOT CAUSE | POTENTIAL SOLUTIONS | IMPLEMENTATION |
|---|--|--|---|
| Too many responsibilities, too many staff | - Lack of state support | <ul style="list-style-type: none"> - Standard forms, operating procedures - Clear guidance to reduce local research time - Common application - State website as a clearinghouse | <u>Local Role:</u> - Inform state efforts to generate materials <u>State Role:</u> - Drive solutions <u>Other(s):</u> - FEMA could return CRS savings % to locals |
| | - Lack of predictable and steady revenue | <ul style="list-style-type: none"> - Dedicated, non-competitive multi-year (~5) revenue stream for locals | <u>Local Role:</u> - Examine existing fee + dedicated fund use <u>State Role:</u> - Fork it over, especially for implementation <u>Other(s):</u> - University apprenticeship for multi-year assignment |

5.0 Workshop Agenda

Below is the workshops agenda that structured the 3-hour events. Each of the three workshops held across the coast followed the same agenda.



CPRA's Flood Risk and Resilience Program

Parish Flood Risk and Resilience Capability and Capacity Assessment: Workshop Agenda

Overview

Thank you for taking the time over the last month to participate in CPRA's Parish Flood Risk and Resilience Capability and Capacity Assessment. We appreciate your participation in interviews and the survey process and your attendance at this follow-up workshop.

Nonstructural mitigation projects recommended through CPRA's Flood Risk and Resilience Program include dozens, hundreds, or thousands of residential elevations, residential acquisitions, or non-residential floodproofing actions within a single geographic area, depending on the needs of the area. As CPRA moves forward with program planning and implementation, we need to better understand how projects can be implemented effectively and the various strengths or challenges parishes may have in project planning, management and implementation. We are also interested in the parishes' capacity to implement and manage other flood risk mitigation project types, such as stormwater management and drainage improvements, for example, as well as key programs and policies to reduce the need for future mitigation projects. **This understanding will help us to focus resources to support your parish and other parishes effectively and efficiently.**

The Flood Risk and Resilience Capability and Capacity Assessment is comprised of three elements: parish interviews, in-depth online surveys, and multi-parish workshops. The multi-parish workshop is an important element of the capacity assessment, both to assist in developing consensus around the assessment findings and proposed recommendations, as well as to develop greater dialogue and networks of communication between parishes.

This document aims to describe the workshop's objectives and outcomes, as well as the approach and agenda. We welcome your full engagement in the workshop, and we will never quote you directly, in any presentations or published reports related to this assessment, without your permission. Your time is valuable. Thank you for committing to this effort.

Objectives & Outcomes

The workshop includes four primary objectives:

1. To confirm, discuss, and refine our findings from the interviews and online surveys conducted with your parish. We will also use this opportunity to address any possible gaps in critical information.
2. To prioritize and build group consensus around key challenges in collaboration with other parishes.
3. To develop and consolidate recommendations based on the identification of root-cause issues and possible solutions, at the local, parish, and state level. In particular, we hope that the participants' feedback during the workshop will result in three high-priority recommendations for the state upon which to develop the final report.
4. To create a stronger set of peer relationships among parishes based on similar challenges, proximity, capacity, and/or shared goals and aspirations.

Workshop Locations

Three multi-parish workshops will be conducted across the coast with approximately 15-20 parish participants attending each workshop. Meetings will be held:

- **June 5, Tuesday, 1:00-4:00pm, Northshore**
Greater Covington Center Rental Facilities
317 N. Jefferson Ave.
Covington, LA, 70433
http://www.covla.com/city_resources/greater_covington_center/index.php
(Note: meeting room #2)
- **June 6, Wednesday, 9:00-12:00pm, Lafayette**
USGS Wetland and Aquatic Research Center
700 Cajundome Blvd.
Lafayette, LA, 70506
<https://www.usgs.gov/locations/wetland-and-aquatic-research-center-lafayette-la>
- **June 7, Thursday, 9:00-12:00pm, Southeast**
St. Charles Parish East Regional Library
160 West Campus Dr.
Destrehan, LA 70047
<https://www.myscpl.org/visit/eastregional>
(Note: large meeting room)

Workshop Agenda

| Time | Topic |
|---|--|
| Introduction & Presentation of Preliminary Findings (1 hour, 5 min) | Introductions & Overview of Goals and Context, Agenda Overview of CPRA, Master Plan, Flood Risk and Resilience Program, and capacity assessment goals |
| | What We've Heard So Far CPRA will share what we heard. The group will brainstorm additional findings and potential solutions to evaluate through the course of the workshop <ul style="list-style-type: none"> • Did we get it right? • What's missing? |
| | Prioritization Exercise Participants will place stickers that correspond to responses to the below questions: <ul style="list-style-type: none"> • Green sticker: What's the most important challenge for your parish? • Blue sticker: What's the most important recommendation for your parish? |
| (10 min) | Break |
| Small Group Break-Outs (50 min) | Reconvene in Small Groups Participants will be broken into groups based on the results from prioritizing the "most important" challenges. Each group will further explore three key challenges and the root causes associated with these challenges. |
| | Key Challenges and Root Causes (<i>Discuss 5 min per key challenge</i>) Key questions: <ul style="list-style-type: none"> • What are the root causes associated with (three) key challenges that have been brought up today? • Are the root causes widespread or isolated? • Pick three root causes for which to brainstorm solutions |
| | Brainstorming Solutions (<i>Discuss 5 min per root cause</i>) Key questions: <ul style="list-style-type: none"> • Identify potential solutions for each of the root causes • Clarify the local role, state role, other important roles in implementation |
| | Prioritizing and Refining (<i>Discuss 5 min per root cause</i>) Key questions: <ul style="list-style-type: none"> • What root cause do you think is the highest priority? • What potential solution could have the most impact statewide? |

| | |
|---|--|
| <p>Presenting Key Findings of Small Group Break-Outs</p> <p>(45 min)</p> | <p>Reconvene</p> <p>Group Report Outs (<i>Representative from each of the 3 small groups provides summary, 6-7 mins each</i>) Findings related to key challenges (each group will have three):</p> <ul style="list-style-type: none"> • What is the highest priority root cause for each key challenge? • What are the potential solutions? • What is the role of the state, parish, or others? • What potential solution is the most important? Why? <p>Prioritization Exercise Participants will place stickers that correspond to responses to the below question:</p> <ul style="list-style-type: none"> • What recommendation could have the most positive impact statewide? <p>Consolidating Findings, Building Consensus Key questions:</p> <ul style="list-style-type: none"> • Did the groups get it right? • How have the potential solutions changed through the workshop? • What are the <i>top three</i> recommendations from the workshop? • What is the role of the State, parishes, others? |
| <p>Conclusion</p> <p>(10 min)</p> | <p>Path Forward and Depart Key questions:</p> <ul style="list-style-type: none"> • How would you like to see this initiative move forward? • What do you see your role as in this process? • How would you like to be engaged moving forward? |

6.0 Workshop Posters

Below are the seven posters that compiled the preliminary results for the key challenges and potential solutions as suggested by participants during the online survey and interview phases. The posters are organized by seven key topics (Staffing, Funding, Projects, Policies, Education, Coordination, and Data). Lastly, the poster board used to structure the small group break-out sessions is also included.



Staffing



Use the stickers provided to vote for your highest priority challenges and solutions. Add your own challenges or recommendations in the additional space provided below.

Challenges

Parishes have too few staff, too many responsibilities

In-house staff experience/knowledge gaps

- Grant management
 - Procurement
 - Financial monitoring
 - Technical/engineering expertise
- Floodplain management
 - University students not coming in ready
 - Difficult to attract experienced people due to lack of funding
 - Political will to enforce certain policies

Contractors may lack financial capacity

Contractors may lack necessary capabilities and local knowledge

Contractors have vested interest in ongoing employment

- Contractors not transferring knowledge/supporting capability building creates a relationship of dependency

What Did We Miss?

Potential Solutions

Grant funding for additional local staff

State or regional “temp agency” for local staff support

- Insurance/appraisal review
- Training for inspectors/appraisers
- LOMR assistance for homeowners
- Technical assistance getting permits

Regional floodplain manager

University apprenticeship program

State-approved list of contractors that meet certain requirements

What Did We Miss?



Funding



Use the stickers provided to vote for your highest priority challenges and solutions. Add your own challenges or recommendations in the additional space provided below.

Challenges

Unaffordability of local match for owners

Funding time horizons do not align with need

- Need for mitigation funding during recovery process
- Need for mitigation funding coincident with other renovations (e.g., during substantial improvements (SI))

Complicated program application and management processes can be a barrier to entry

Raising revenue locally is a challenge

Uninsured people at risk and/or being priced out of their homes

Lack of trust in where funding is going

What Did We Miss?

Potential Solutions

Cap costs for elevations, acquisitions

- Provide reimbursement funding to people who have elevated on their own

State funding program to incentivize compliance through substantial damage (SD)/improvements (SI)

Regional elevation grants for rapid implementation after flooding

Additional incentives for acquisition

Sliding scale for match support to property owners

Cost-share reward for higher standards; agreement to assess/increase standards

State level tax credits

Mortgage down payment assistance outside the flood zone

State micro-loan program for small businesses

- Sales tax credit for retrofitting, permeable parking lots, etc.

What Did We Miss?



Projects



Potential Solutions

- Reduces tax base, cost of maintenance, causes checkerboarding/inequities, etc.

- Effectiveness, staff capacity to implement/maintain, etc.

- Prioritization of repetitive and severe repetitive loss (RL/SRL), low to moderate income (LMI), project types may not match need, etc.
- Grandfathering trap- have not technically flooded; do not fit into current funding programs

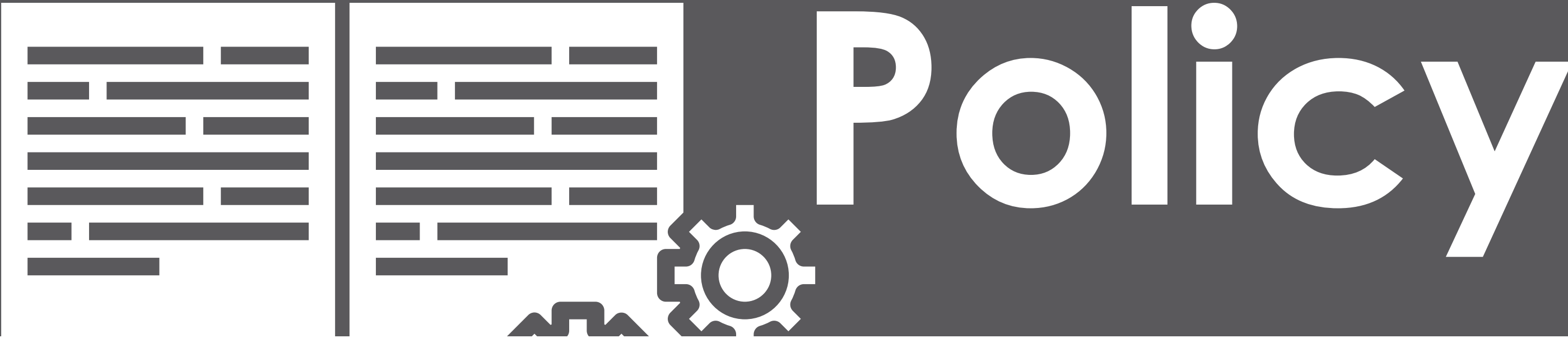
- Mitigation reconstruction, lifts for residential elevations, alternative housing during projects, etc.

- Streamline program processes
- Standardization of project types
- Standard operating procedures
- Online application and management portal

What Did We Miss?

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Use the stickers provided to vote for your highest priority challenges and solutions. Add your own challenges or recommendations in the additional space provided below.

Challenges

Inadequate regulations

- Weak building codes re: renovations
- Land use does not incorporate future risk
- Flood damage prevention ordinance
- Residual levee risk
- Stormwater requirements
- Requirements to maintain standards once land is developed
- Encroachment in the floodway
- Challenges to implementing freeboard

15 empty circles for voting

Enforcement challenges

- Substantial improvements/substantial damage
- Permitting and monitoring unpermitted activities
- Building codes, zoning, and floodplain ordinances
- Maintaining standards post development (e.g., drainage capacity)
- Enforcement of the National Flood Insurance Program (NFIP)

15 empty circles for voting

Political opposition to higher standards

- Builders and developers do not want to elevate
- Public pressure due to costs of implementation (particularly SI/SD)

15 empty circles for voting

Maintenance of waterways within state responsibility

15 empty circles for voting

Permitting or legislative requirements could be outdated/
not meet the needs associated with the current flood risk

15 empty circles for voting

What Did We Miss?

15 empty circles for voting

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Potential Solutions

State funded review of policies and regulatory regimes with incentives for adoption of recommendations

15 empty circles for voting

State standardized BCA/value proposition publications to prove the need for higher standards

15 empty circles for voting

State-level advocacy/lobbying to re-evaluate and update the Code of Federal Regulations (CFR)

15 empty circles for voting

State-level floodplain management policies

- State freeboard requirement, state floodway definition, state stormwater requirements, state agencies adhere to watershed plans, etc.

15 empty circles for voting

State adherence to higher standards when developing or implementing projects

15 empty circles for voting

What Did We Miss?

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Education



Use the stickers provided to vote for your highest priority challenges and solutions. Add your own challenges or recommendations in the additional space provided below.

Challenges

Fear and sense of powerlessness

- “Rainxiety” – people get anxious every time it rains

Complacency and a false sense of security

Lack of consensus around flood risk

Mistrust of government

Misconceptions of economic impact of higher standards

- Among elected officials, developers, and realtors, etc.

What Did We Miss?

Potential Solutions

Outreach and education program for elected officials

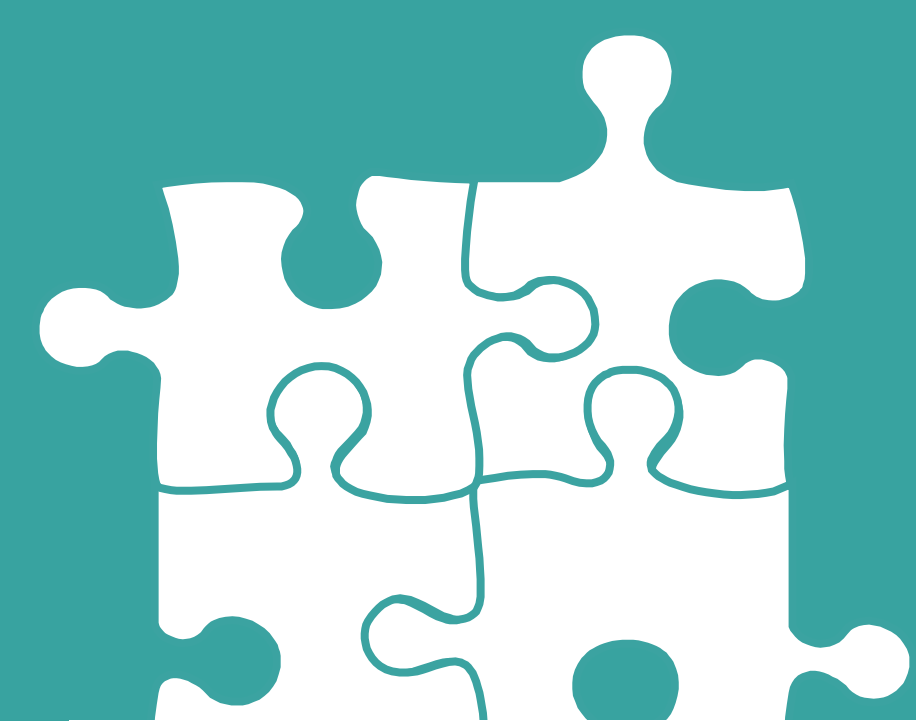
Outreach and education program for the general public

Outreach to other key sectors including developers, home builders, and realtors

“Everything Flood-Related” website to house all existing and planned support materials

Best practices “library” from other parishes and states

What Did We Miss?



Coordination



Use the stickers provided to vote for your highest priority challenges and solutions. Add your own challenges or recommendations in the additional space provided below.

Challenges

Siloed parish departments/lack of communication and knowledge sharing

Insufficient cross-coordination between jurisdictions *within* parish

Insufficient *regional* cross-coordination

- Insufficient regional drainage coordination
- Land use planning, infrastructure planning, project planning
- Need for more CRS User Groups
- Need for regionally-based project grants

Lack of state coordination across state agencies or with local jurisdictions

- Not adhering to local ordinances when developing or implementing projects
- Failure to recognize watershed / downstream impacts of activities
- Coastal flood modeling does not consider inland contributors to flood risk along the coast

Trans-boundary issues with other states

What Did We Miss?

Potential Solutions

State facilitated workshops to increase coordination

State facilitation of MOUs

State ranking system for evaluation of developers

Local review mechanism for state construction

Investigation into regulatory mechanisms to prevent cross-boundary adverse impacts (in and out of state)

What Did We Miss?





Potential Solutions

- “It’s not always clear what’s out there”

What Did We Miss?

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Breakout Session



Discuss three key challenges in your small group. Determine the root causes of these challenges and consider potential solutions. Write in your ideas, including the role of Locals, the State, and Others in the implementation of the solution.

| Key Challenge | Root Cause(s) | Potential Solutions | Implementation |
|---------------|---------------|---------------------|---|
| (1) | | | <div>Local Role:</div> <div>State Role:</div> <div>Other role(s):</div> |
| (2) | | | <div>Local Role:</div> <div>State Role:</div> <div>Other role(s):</div> |
| (3) | | | <div>Local Role:</div> <div>State Role:</div> <div>Other role(s):</div> |